Improving the Competitiveness of Alberta's Retail Electricity Market

prepared for

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March 2002

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INTRODUCTION

Independent review of RIS report and implementation recommendations

In its efforts to improve the effectiveness and competitiveness of Alberta's retail electricity market, Alberta Energy retained Navigant Consulting Ltd (Navigant Consulting) to provide an independent review of the issues and recommendations provided in the September, 2001 Report of the Retail Issues Subcommittee (RIS) on the Alberta Retail Electricity Markets (the RIS report), identify other significant issues, make additional recommendations, determine how best to implement the final recommendations and identify the expected market changes that could be expected to result from the recommendations.

The Retail Issues Subcommittee (RIS) is a subcommittee of the Energy Ministry's Electric Utilities Advisory Committee charged with identifying impediments to the development of a vibrant retail market sector in Alberta and recommending solutions for moving towards a fully competitive market.

The RIS report identifies a number of issues and makes various recommendations intended to create a vibrant and competitive electricity retail market in Alberta. The recommendations cover the following areas:

- Regulatory and policy uncertainty
- Wholesale market interactions
- Wires Service Providers (WSP) and Load Settlement Agent (LSA) related issues
- Credit issues
- Consumer education
- Code of conduct and affiliate relationships, and
- Other impediments (eg, metering and disclosure requirements).

Navigant Consulting's review of the RIS report was undertaken concurrently with a number of other initiatives impacting Alberta's retail electricity market. These initiatives include:

- Review by the Power Pool of its prudential requirements
- Cap Gemini Ernst & Young study of settlement issues and resolutions
- Competitive metering policy development work undertaken by Alberta Energy
- Gas retail market design work being undertaken by the Alberta Energy and Utilities Board (EUB)
- Review of RRO pricing by Dr. Larry Ruff, and
- RRO submissions and rulings from Alberta's RRO providers.

These other initiatives may either be impacted by or impact on Alberta Energy's decisions with respect to the RIS Committee recommendations. To the degree possible given timing, information provided by Alberta Energy and the agencies undertaking the above initiatives and uncertainty regarding the ultimate outcome of these initiatives, Navigant Consulting attempted to reflect and provide additional considerations for these initiatives in its analysis and recommendations.

Navigant Consulting's recommendations reflect and support other initiatives currently underway

Approach

Navigant Consulting's approach comprised four broad tasks:

1. Review RIS report, including an assessment of the issues raised and implications of the recommendations. Subject matter experts from Navigant Consulting were utilized and best practices from other jurisdictions were reviewed for each of the primary topic areas covered in the RIS report.

2. Further analysis of stakeholder feedback and significant issues. Discussions were held with RIS members and with other stakeholders/agencies to gain further insight beyond the RIS report, discuss other issues and capture observations of the market. Given Navigant Consulting's observation that the retail market for larger Default customers is generally working reasonably well, Navigant Consulting focused its analytic efforts on the small business and residential market.

3. Development of Recommendations.

4. Preparation of the Final Report.

Report Structure

A discussion of the principles of a well-functioning retail market follows this introduction. This section starts with the RIS preliminary definition of a "competitive" market, followed by a detailed discussion of each of elements of a competitive market and concludes with highlights from the UK retail electricity market.

Report starts with principles of a well-functioning retail market

Following this discussion, each of the major issues identified in the RIS report are discussed in detail. Each of these "issues" sections identify the relevant RIS recommendation(s), followed by a detailed discussion of the background surrounding the associated issues, possible mechanisms to resolve the issue, how the issue impacts the competitiveness of the market and, where appropriate, highlights best practices from other jurisdictions. Finally, each section concludes with Navigant Consulting's recommendations and implementation considerations.

...followed by 1) detailed discussion and recommendations on each of the topic areas covered in the RIS report, and 2) expected impact of recommendations

The expected impact that the major recommendations are expected to have on the attractiveness of market entry is discussed in the penultimate section of the report. The analysis in this section is based on a high-level market entry model that Navigant Consulting has used in other projects to help retailers make decisions regarding whether or not to enter a particular market.

Lastly, the final section of the report provides a summary of the recommendations and implementation considerations.

PRINCIPLES BEHIND A WELL FUNCTIONING RETAIL MARKET

Downward pressure on prices and innovative new products and services

Retail competition for energy commodity has been strongly promoted and touted as having two primary benefits:

- ***Downward pressure on prices*** – market discipline is more effective than regulation for maximizing economic efficiency.[a] Furthermore, retail competition helps to ensure that any cost savings engendered by wholesale competition are passed through to retail customers and are not captured by the distributor or party with the retail sales obligation.
- ***Innovative new products and services*** – competition generally spawns innovation in the form of new products and services as competitors try to develop offerings that better suit customer needs.

The expected outcome from these two forces is that customers become more satisfied (the services they are buying are closely tailored to their needs) while their expenditures for the commodity product (electricity) decrease.

To guide the formulation of policy and market rules, the RIS committee identified seven principles for a well functioning retail market. This section expands on these principles and provides highlights from a recent assessment by Ofgem of the UK retail electricity market. This assessment is particularly relevant given that Ofgem determined that the UK retail electricity market is "competitive" and is proposing that prices do not need to be regulated in the future (this is analogous to the elimination of RRO in Alberta).

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[a] Economic efficiency has several dimensions: allocative efficiency, dynamic efficiency, and productive efficiency.

- Allocative efficiency is the ability of the economic system to allocate resources to those uses with the greatest value to the society. In the electricity industry, allocative efficiency requires that electricity be priced at a level which reflects its actual costs.
- Dynamic efficiency is the efficient allocation of resources over time. Achieving dynamic efficiency implies that new technology is adopted as it becomes economic. It also implies that new investments are made when the returns to society from the investment are greater than the returns from any other investment use. Innovation of new products and services is an example of dynamic efficiency.
- Productive efficiency (sometimes called X-efficiency) is the efficient use of the resources available. A system is efficient if it produces its output using the minimum possible total of resources.

Retail Principles

A summary of minimum market conditions for and comments on the principles defined by the RIS committee are provided in **Table 1** below. The remainder of this section develops some indicators of a well functioning competitive retail market based upon these principles as well as consideration of the desired outcomes.

Table 1 – Principles of a well-functioning retail market, minimum conditions and comments

Principle	***Minimum condition***	***Comment***
Many active sellers	- At least three to five major sellers (e.g. > 70% of customers know the companies), and several niche players	The necessary number of competing sellers depends in part on the service that existing customers receive if they do not elect a competitive supplier
Low entry costs	- Provisions pertaining to billing, settlement, and prudentials do not impose undue costs on retailers - Wholesale market performance adequate so that physical asset ownership or entitlements are not needed to provide competitive retail offering - New product and price offerings are continually developed	
Low cost information about price offerings	- Can obtain current tariff and average price from current supplier with one short phone call. Also bill clearly states quantity and cost.	- A public shopping guide listing available prices is not necessary. Suppliers will promote their offerings.
Buyers free to choose	- No exit or sign-up fees that do not reflect actual costs incurred for this customer - Single call to terminate or switch service	
Options to readily compare choices		- Duplicates low cost information principle
Prices not affected by non-market forces	- Suppliers serving the same class of customers have similar obligations.	- Price caps and rebates distort market price signals
Non-discriminatory open access	- Any customer or retailer has the same ability and incurs the same charges for access to the distribution system and other regulated services provided by distributors.	

These principles can be converted into tests that provide indicators of the degree to which one may have a well functioning competitive market. As such they can be used to guide market rule changes and retail market reforms to address the market deficiencies that prevent these principles or criteria from being realised.

The evaluation of the market needs to be performed separately for each major class of customers. For example, the development of the Alberta retail market for large Default customers is clearly progressing at a different rate than for RRO customers. This has been the case in almost all other retail electricity markets. In recognition or anticipation of this fact, some jurisdictions have opened the market to competition in tranches, with large customers having access to competition first, followed by progressively smaller customers having access.

Salient Indicators

Primary indicators reflective of a well functioning competitive retail market include:

Primary indicators are:

1) Thin margins

2) Decreasing commodity revenue as a percentage of sales, and

- Thin retail margins on pure commodity. Retailers may make a lot of money, but the income comes from volume and new products and services. The retail margin will be steady to declining over time. Retail margins reflect "normal profits" where the retailer receives a return that compensates it for the risks associated with its product offerings.
- Commodity revenue will decrease as a percentage of total sales (normalized over commodity seasonal cost cycles) as retailers introduce new products and services.
- Diverse mix of product and service offerings. Retailers compete by differentiating their product and service offerings in an effort to better meet customers' requirements. This results in a wide range of different commodity offerings allowing customers to select an offering that meets their risk preferences. New services and service bundles are offered to meet customers' desire for greater convenience.

3) Diverse mix of product and service offerings

Since these primary indicators are hard to monitor and to use to establish benchmarks, other indicators are frequently used as benchmarks to address the question of whether one has a competitive retail market. These benchmarks include the following:

...but these indicators are hard to monitor, so other benchmarks are typically used

- ***Market share of the largest provider*** – once the monopoly provider loses a certain percentage of the market; the market may be considered to be competitive. For example, in Pennsylvania, if the incumbent utilities do not lose 30% of their customers (by rate class) by a certain date, then the regulator will assign customers to alternative suppliers. In Texas, the price that the incumbent supplier can charge is regulated until it loses 40% of the load within a given customer class. The difficulty is in establishing the appropriate percentage.
- ***Number of competitive suppliers*** – many look to see that there are a significant number of suppliers (e.g. more than 10 suppliers). Long distance service in the United States is very competitive with only three

major suppliers, but a number of fringe competitors. The trend in many mature industries (e.g. credit cards, airlines, groceries, banking, automobile gasoline) is towards a small number, such as three to five major players, plus a number of niche players. The minimum requirements for a competitive market varies by industry, market rules and market conditions. For small markets such as Alberta, the "ideal" number of competitors may initially involve striking a balance between achieving a fully competitive market and allowing suppliers to have a sufficient number of customers so that they can realize the minimum efficient scale. For a retail market that offers a viable "default service[a]" for customers that do not elect a competitive supplier the minimum number of suppliers may be: (1) at least three major players; and (2) a number of small players serving niche markets. Three major players can be expected to exert sufficient price discipline if customers have a "safe harbour" retail service such as the RRO offered in Alberta. The presence of niche players indicates that innovators can enter the market and that buyers have options (a well functioning market provides options, it is not dependent upon the number of buyers selecting those options).

While there are numerous active sellers serving large Default customers in Alberta, this minimum condition of many active sellers is not satisfied in the RRO market segment. This can be explained by the many different elements of the Alberta market identified in this report that contribute to high entry costs. One element that largely appears to be remedied is the performance of the wholesale market. With market opening in January 2001, wholesale market price volatility and concerns with respect to the exercise of market power by suppliers represented a barrier to entry to retailers. Retailers without physical assets or contract positions were at a competitive disadvantage relative to retailers that already had such positions, although this disadvantage has largely been eliminated through developments in the wholesale market.

Navigant Consulting expects that additional retailers will elect to enter the Alberta market as the retail electricity market in North America matures. As their brand becomes established in other markets, these retailers will leverage off existing systems and marketing campaigns in an effort to spread their fixed costs over a wider customer base. To promote this development Alberta policy makers should pursue policies that reduce market entry costs, as discussed elsewhere in this report.

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[a] "Default service" is the term used generically by retail market designers to describe the service provided to those customers who do not switch. The actual name for this service varies from market to market. In the context of the Alberta retail electricity market, this would include RRO service for small business, residential and farm customers and Default supply service provided to larger customers. Throughout the remainder of this report, the use of the term default service (with a lower case "d") will refer to both RRO and Default supply service, whereas Default service (with a capital "D") will refer specifically to service provided to those customers that are too large to be served under the RRO.

- ***Customer awareness of choice and options*** – a relatively small number of customers may elect to buy electricity from competitive suppliers. If customers are aware of the alternatives and the transaction costs of switching are not high, high market share for the incumbent is not necessarily a sign of market failure. Customer awareness of their options can be measured. Awareness among large Default customers in Alberta is likely to be relatively high. Although the government has taken some steps to increase customer awareness among RRO customers, their level of awareness is relatively low. Recommendations on mechanisms the Alberta government can utilize to increase customer awareness are provided in *Consumer Education* starting on page 70.

- ***Transaction costs are low*** – any time a customer changes a supplier, it requires some time and effort, and customers may encounter some costs. In a well functioning market, these switching costs are low. Key indicators of low transaction costs include:
  - No exit or sign-up fees that do not reflect actual costs incurred for that customer. For example, the use of contract termination fees to recover the discounts a retailer provides when they sign up a new customer is not necessarily anti-competitive. However, they may impede customer switching and hence the effective functioning of the market. In Alberta, the existence of exit fees for ATCO RRO customers that switch is clearly an impediment for ATCO RRO customers wishing to switch. Navigant Consulting believes the government should explore alternative RRO tariff structures and provisions to eliminate these exit fees (these and other aspects of the RRO tariff are discussed in greater detail in the *Regulated Rate Option Tariffs* section on page 17).
  - The customer can switch or terminate service with a single phone call.
  - The information about a customer's current tariff and average cost can be easily obtained (eg, through a single phone call or a web inquiry). Quantities and prices should be clearly stated on the bill.

- ***Competitive wholesale markets*** – A competitive wholesale market is an essential precursor to an effective and competitive retail market. Similarly, a dysfunctional wholesale market adversely affects the retail market and can create a barrier for retailers that do not have physical or financial positions in the market that allow them to avoid these market dysfunctions. This is not a significant issue in Alberta, given the improvements in the competitiveness of Alberta's wholesale electricity market and the initiatives currently underway that are expected to lead to further improvements.

- ***Consumer protections are in place, but do not impose high transaction costs*** – consumers should be protected from false advertising, misleading claims, slamming, cramming and other abuses, but these protections should not impose high transaction costs. Strong sanctions for violators may be as effective in preventing abuse as elaborate procedures (e.g. wet signature requirements, prior approval of advertising claims) with lower transaction costs and barriers to new entrants. There are a variety of protections already in place in Alberta and, with the exception of the requirement for an actual customer signature, these protections do not impose high transaction costs.

- ***Suppliers serving the same class of customers have similar obligations and similar access*** – if obligations for and access to regulated services vary between suppliers, then there will be structural differences in costs that are not related to the suppliers' efficiency and/or services and service levels that are not related to the suppliers' creativity. In effect, there needs to be a level playing field for all suppliers. Many stakeholders feel that the Alberta retail electricity "playing field" is not quite level and that new retailers in Alberta do not enjoy the same access as affiliated retailers. Mechanisms to address these issues are discussed in *Code of Conduct* starting on page 80.

Default market reasonably competitive, but RRO market is not

When measured against the indicators listed above, the Default market in Alberta appears to be reasonably competitive, but the RRO market is not. In its efforts to improve the competitiveness of the RRO market, Navigant Consulting believes that the government should consider these indicators in establishing and prioritizing further development of and refinements to Alberta's retail electricity market rules and regulations. The above indicators can also serve as useful tests in assessing the risks of eliminating RRO as planned for small business customers in 2004 and residential customers in 2006

UK Market Experience and Ofgem's Determination

UK market is arguably the most competitive retail electricity market

Many industry experts view the UK electricity market as perhaps the world's most competitive retail electricity market. A recent assessment by Ofgem, the UK gas and electricity market regulator, supports this view.

Given the success of retail competition in the UK, there are several valuable lessons for the government and other agencies in their efforts to improve the effectiveness of retail competition in the Alberta electricity market (and for other jurisdictions seeking to achieve a competitive retail electricity market).

The following sections provide highlights of customer experience in the UK market, followed by a discussion of the implications for the Alberta market. Finally, the approach that Ofgem used to assess the competitiveness of the UK market is summarized. As with the indicators described above, the approach used by Ofgem could be replicated by the Alberta government in assessing the competitiveness of the Alberta retail market prior to eliminating RRO.

Customer Experience

In November, 2001, Ofgem issued a report on customer experience in the UK gas and electricity market[a]. The report is a summary of market research with over 2,300 gas and electricity customers in the UK.

Relevant highlights of the report are provided below:

Highlights of UK market include:

1) 38% switching

2) uniform switching across customer classes

3) 80% of switchers have gone to a dual fuel (gas/electric) supplier

- The level of switching has grown substantially between 2000 and 2001:
    - switching among electric customers has doubled from 19% to 38%
    - switching among gas customers is up from 29% to 37%[b].
- The rate of switching is reasonably uniform across different customers classes and demographic groups, although switching among rural customers and customers in Scotland is lower than average.
- The primary reasons for switching electricity supplier were:
    - Price (79% of respondents mentioned)
    - Dual fuel or "single bill" (49%), and
    - Persuasive salesman (21%).
- Eighty percent of switchers have combined their electricity and gas supply with a single supplier (retailer), partly in response to dual fuel offers made by these suppliers. Just over half of electricity switchers transferred their electricity supply to their current gas supplier and slightly less than half of gas switchers transferred their gas supply to their current electricity supplier.
- Three-quarters of all switchers recall being contacted by door-to-door sales agents, which highlights the effectiveness of this sales approach over others[c].

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[a] *Experience of the competitive domestic electricity and gas markets*, Research study conducted for Ofgem by MORI, November 2001. The report can be found at: http://www.ofgem.gov.uk/public/pub2001.htm

[b] The switching rate among gas customers may be partially due to long term contractual commitments by British Gas in serving regulated customers which resulted in higher prices than those offered by retailers that did not have such long term commitments. This is somewhat analogous to the structural differences that allowed retailers to underprice the gas utilities when the Ontario retail gas market opened.

[c] While door-to-door selling is clearly an effective sales approach, experience in most jurisdictions suggests the use of door-to-door sales agents who are compensated on a commission basis creates significant potential for misrepresentation and other

- Satisfaction with electricity and gas suppliers is quite high, with less than 3% of customers dissatisfied. The greatest satisfaction surrounds the frequency and accuracy of billing. Seventy percent of switchers state that their new supplier has met their expectations.
- Awareness of different suppliers remains high.
- In spite of a concerted effort by Ofgem to provide various channels for accurate "apples to apples" comparison of prices, there is significant confusion about the different prices offered by suppliers. Only one third of customers succeeded in making their own comparisons and half of switchers did not make their own comparisons. About 40% of customers found it was "very easy" or "fairly easy" to compare prices.
- Of the 3% of customers that tried to switch but failed, the primary reasons were:
  - *"Something went wrong in the transfer process and I gave up"*
  - *"Old supplier objected prevented me from transferring"*
  - *"New supplier couldn't get all the necessary information from the old supplier"*

Lessons for Alberta

Key lessons for Alberta from UK

Although the UK market is more than an order of magnitude larger than the Alberta market, there are several relevant lessons from the UK market experience that the government should consider in it efforts to improve the competitiveness of Alberta's retail electricity market. The key lessons appear to be:

Dual fuel contracts provide customer savings in the range of $20/year

- Dual fuel (gas and electric) supply contracts allow suppliers to realize economies of scale in customer care. These savings (estimated to be between $20 - $30 per customer per year) can then be shared between customers (lowering their costs) and suppliers (increasing their profits). This reinforces the need for the Alberta's retail gas market and retail electricity market rules to be reasonably consistent.

Door to door marketing most effective means of capturing customers

- Door-to-door marketing is the most effective means of capturing customers. To date, most residential marketing activity in Alberta has been through advertising and direct mail. This suggests that higher switching rates would be expected once marketers begin using door-to-door selling. It is interesting to note that in Ontario, where the electricity market is not yet open but retailers are able to market to customers, industry players indicate that between 15% and 20% of residential customers have signed contracts with a retailer, most of whom have relied

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questionable or misleading tactics. To this end, the market rules should provide reasonable customer protection against these possible abuses.

on door-to-door selling (the exception is Toronto Hydro Energy Services, which was reported to have had a high response to direct mail campaigns in 2000). Direct Energy is already supplying more than 30% of residential customers in Ontario with natural gas and, as such, is able to offer dual fuel contracts (although they are not marketed as such). Both Toronto Hydro Energy Services and Ontario Hydro Energy offer gas as well, although the success of their gas marketing efforts and proportion of their customers signing up for dual fuel contracts is not known.

Problems with switching can persist

- Even after several years of experience with retail switching and numerous refinements to the market rules, there continue to be occasional problems with switching in the UK market. This highlights the importance of current efforts in Alberta to improve the switching and settlement process. The importance of making changes to the switching and settlement process in Alberta is further reinforced by study results indicating that the key problems encountered by switchers were problems with billing and with the existing supplier making it difficult to leave.
- Switching rates greater than 30% to 35% would appear to be a reasonable indication of a vibrant retail market and a threshold for removing the RRO obligation. However, the ultimate decision regarding whether the RRO obligation should be removed should also consider the number of major sellers since the RRO represents a "safe harbour" that enhances the competitiveness of the retail market by providing a viable alternative to competitive retail offerings.

Two other lessons that can be drawn from the UK market experience relate to the role and scope of the regulator.

1. An active regulator (Ofgem) can help to promote competition in many subtle ways. For example, the detailed information provided in Ofgem's market research report on customer experiences would be helpful to retailers in developing their customer offers and targeting their marketing efforts.

Single regulator more likely to achieve competitive market than multiple regulators

2. A single regulator provides a much greater opportunity to achieve a competitive market through its ability to enforce (reasonably) uniform rules across the entire market. It is highly unlikely that the UK market would have developed to its current, highly competitive state if there were multiple regulatory agencies with overlapping or conflicting authority and responsibility. This highlights the importance of moving towards a single regulatory authority (or more uniform regulatory framework) in Alberta, instead of the multiple regulatory authorities currently in place. This is an important issue given EPCOR's and ENMAX's role as the major retailers in Alberta and the oversight over their regulated service offerings by the municipalities.

Based on a recent review of operating models for energy regulators around the world undertaken by Navigant Consulting, Ofgem's operating model was found to be much more conducive to regulatory "success" than other operating models used in other jurisdictions. This suggests that Ofgem, along with a few other energy regulators, could serve as a role model if the government of Alberta wishes to consolidate the regulatory framework for Alberta's electricity industry into a single regulatory authority.

Criteria Used by Ofgem to Measure the "Competitiveness" of the UK Retail Gas and Electricity Markets

Concurrent with the report described above, Ofgem also released a review of domestic gas and electricity competition[a]. In this report, Ofgem considers the degree of competition in the gas and electricity markets and possible proposals for future regulation of these two markets.

Ofgem's report states that the important conditions that tend to promote competition include:

- The prevention of anti-competitive agreements and practices including the abuse of market power, if it exists
- Customers are aware of a range of competitive offers from suppliers, and
- New competitors are able to enter and challenge the market.

The report also states that:

> *The development of competition is a dynamic process, characterised by constantly changing structures, behaviours and performance. The development of competition cannot be measured clearly against a single simple set of indicators, for example market shares. The functioning of the market depends upon the combined effects of the action of the relevant distributors and suppliers, competitors and customers, as well as the structural conditions in which they all operate.*

Ofgem criteria for assessing competitiveness of the UK market

In determining the degree of competition in the markets, Ofgem considered:

- customers' experiences
- customer switching behaviour
- market shares
- price and non-price offers
- entry and exit of suppliers, and
- barriers to entry.

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[a] Review of domestic gas and electricity competition and supply price regulation, Evidence and Initial Proposals, *Ofgem, November, 2001.*

The information used in this determination included the most recent survey described above, plus an annual survey of suppliers (ie, retailers). Customers' experiences and customer switching behaviour are described in the previous section.

UK retail electricity market highly fragmented, seven suppliers have market shares > 10%

Market shares (by customers supplied) for the incumbent suppliers were found to range from a low of 67% for British Gas Trading (BGT) in the gas market to 83% for SSE Energy in north Scotland. The average market share for incumbent suppliers in the electricity market was 70% and had dropped by 10% since 2000. The UK electricity supply market is fragmented, with seven suppliers having market shares greater than 10% and another two having market shares greater than 5%.

The competitive situation in Scotland is interesting. As stated, the market share for the incumbent supplier in north Scotland was 83%, much higher than for the rest of the UK market. The Scottish wholesale market was also characterized as being overly complicated and uncompetitive. In addition, there were several special metering/settlement and load control requirements for distributors in Scotland which led to fewer suppliers entering the Scottish market and fewer customers having access to competitive suppliers. The lessons from Scotland, particularly those related to settlement issues, are directly applicable to the current situation in Alberta and reinforce the importance of efforts to improve the settlement process.

Saving for switchers was 6% to 14%

In terms of prices, Ofgem reported that the median saving for direct debit gas customers who switch away from BGT were 14%, with lower levels of savings for customers using other payment methods (credit and prepayment meters). The saving for direct debit electricity customers who switch away from the incumbent suppler were between 6% to 14%, again with lower levels of savings for customers using other payment methods.

Considerable variety of non-price offers

Ofgem found a considerable variety of non-price offers, ranging from dual fuel tariffs (discussed above) and multi-utility offers, green tariffs, insurance offers, energy efficiency deals, loyalty cards, affinity deals, online services and offers aimed at students or older customers. Yorkshire Electricity and Scottish Power's discount for dual fuel tariff was £10.50 (which supports the earlier estimate of customer care and billing cost savings of $20 to $30/customer per year).

Ofgem found that the number of active gas suppliers (or groups of suppliers with common ownership due to mergers) had dropped from 16 in 2000 to 14 in 2001. There were a total of 31 licensed gas suppliers in 2001. For electricity, the number of active electricity suppliers was 13 in 2000 and 12 in 2001 for England and Wales and 12 in 2000 and 10 in 2001 for Scotland. There were a total of 29 licensed electricity suppliers in England and Wales in 2001.

In terms of barriers to entry, key issues included dominant suppliers, issues in the Scottish market (discussed above), operation of the gas market, operation of the electricity market and debt blocking (preventing the switching of customers who are in arrears on their accounts). Ofgem states that dominant suppliers that abuse their market power are subject to the *Competition Act 1998* and that having a dominant position does not preclude new market entrants. In a parallel with the current situation with respect to settlement in Alberta, a supplier's incentive to acquire gas customers was reduced due to:

- Lack of common administration arrangements across Gas Transporters (distributors) results in manually intensive and expensive administration of customers, and
- Lack of consistency and unpredictability in and between Gas Transporters transportation charges creates pricing difficulties for suppliers.

Competition in metering and metering services market would benefit customers

Issues raised regarding electricity market operations included separation of distributors and suppliers and the introduction of competition in metering. Ofgem did not consider separation an issue since the *Utilities Act 2000* requires separation of distributors and suppliers, imposed specific conditions on distributors through their licenses and required the appointment of a compliance officer to ensure compliance with these conditions. Issues were raised regarding the cost-effectiveness of introducing competitive metering, but Ofgem believed that introduction of competition into the £800 million metering and metering services market would benefit customers and facilitate the achievement of other objectives, such as energy efficiency and introduction of innovative metering products.

Ofgem propose replacing regulation via price control with investigation and enforcement under competition law

Based on its assessment of these and other market indicators, Ofgem found evidence that retail competition continues to serve customers' best interests and proposed to replace regulation via price control with the use of powers of investigation and enforcement under competition law. It is interesting to note that the report states that the proposal would "*unify the regulation of gas and electricity markets under competition law and would reduce distortions to the development of dual-fuel offers*".

… essentially what is planned for RRO in 2004 and 2006

Ofgem's proposal to remove price controls and other regulatory instruments in favour of competition law is essentially the same as what the government of Alberta plans to do in 2004 with the elimination of RRO for small business customers and again in 2006 with the elimination of RRO for residential customers. Navigant Consulting believes that the government of Alberta should target the achievement of similar market conditions as currently exist in the UK prior to elimination of RRO.

Strong and decisive steps needed to improve competitiveness of Alberta's retail market

Given the current state of the RRO market in Alberta and the relatively limited time remaining until RRO will be eliminated for small business customers, Navigant Consulting believes that the government of Alberta needs to take strong and decisive steps to improve the competitiveness of the retail electricity market.

The following sections of this report provide specific recommendations on the steps that the government should take. While the recommendations involve changes to several aspects of Alberta's retail market, all of the recommendations are consistent with the need for certainty and transparency as expressed by the RIS committee:

1.1 The Government (should) ensure that its future policy decisions be directed primarily towards furthering the development of a competitive and healthy retail market through design enhancements that are made only after thorough consultation with stakeholders.

REGULATED RATE OPTION TARIFFS

The RIS committee reported that elimination of uncertainty in the retail electricity market was an important step in improving the competitiveness of the market. With respect to Regulated Rate Option (RRO) tariffs, the RIS committee recommended the following:

RIS recommendations on RRO tariff and rebates

1.3 After consultation with stakeholders, the Government act quickly to remove regulatory and policy uncertainty in all areas affecting the development of the wholesale and retail markets, including products, services and prices, by communicating to stakeholders a clear go forward plan including:

- Finalizing RRO regulations.
- Allowing existing rate caps to expire and providing a commitment to avoid the future imposition of retail rate caps.
- To the extent that the Government decides to cushion consumers from high prices, the use of non-discriminatory rebates rather than rate caps be the preferred vehicle for doing this.
- Clear separation of rebates from ongoing consumer billing.
- Definition of the nature and extent of future rebates.

RRO forms the basis for comparison of competitive offers

In response to concerns raised by the RIS committee and other stakeholders, the government of Alberta recently stated that it will not be setting the RRO prices charged by utilities.[a] Since the RRO is the price that most small business, residential and farm customers are currently paying, it is the basis for comparison with competitive offers from other retailers. As such, the price and related provisions for RRO have a significant impact on the competitiveness of Alberta's retail electricity market.

There are significant differences in the RRO offerings available to ATCO, Enmax, EPCOR, UNC and other Alberta customers. The most significant differences between the RRO providers are associated with the:

- RRO energy rate and associated customer service costs
- Switching time and notice period required for customers that want to switch from RRO to another retailer, and
- Exit fees and deferral account recovery charges and mechanisms.

Table 2 provides highlights of the RRO rates and provisions for ATCO, Enmax, EPCOR and UNC customers. Please note that not all of the RRO tariffs given in **Table 2** are approved, some are either interim (pending approval) or proposed as indicated.

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[a] News Release, "Electricity providers and regulators to set Regulated Rate", Alberta Energy, November 29, 2001.

Table 2 – Comparison of RRO tariffs

RRO Tariff Component	***ATCO*** [1]	***Enmax***	***EPCOR*** [2] ***(in Edmonton)***	***EPCOR*** [1], [2] ***(in UNC territory)***
Interim / approved RRO rate for 2002 ($/kWh)	***$0.0478***	***$0.061***	***$0.054***	***$0.065***
Inferred underlying hedge duration	three months	one year	one year	various, up to 3 years
Switching Provisions				
Switching Time/Notice Period	Not stated	30 days	90 days	60 days
Exit Fees / Cost for Expedited Notice Period	Yes ($20 plus applicable deferral account charges and stranded RRO costs)	No	Not stated	No (but must pay $20 to switch in less than 60 days)
Deferral Account Recovery ($/kWh)				
2000 Energy Deferral	unknown	$0.00657	$0.0081	$0.0134
2001 RRO Deferral	unknown	zero	$0.0198	$0.0257
Customer Service Costs				
Customer service fees ($/month)	$3.06	$6.80	$4.06	$4.06
Customer service fees ($/kWh)	$0.0034			
Total annual customer service fees for 7200 kWh	$61.20	$81.60	$48.72	$48.72
Combined annual RRO cost for 7200 kWh [3]	***$405***	***$521***	***$438***	***$517***
Combined unit RRO cost ($/kWh) [3]	***$0.0563***	***$0.0723***	***$0.0608***	***$0.0718***

Notes: (1) Interim RRO rates and proposed customer service charges given for ATCO and EPCOR (UNC) pending EUB approval
(2) RRO rate given for EPCOR is approximate, varies quarterly
(3) Includes customer service costs, but excludes deferral account recovery charges

The following sections discuss each of these differences and the impact these differences have on the development of a competitive retail market. Finally, recommendations on changes to specific aspects of RRO tariffs that would promote greater retail competition are provided.

RRO Rates

Expected RRO costs differ by as much as 28%

Including energy charges and customer service fees, the expected RRO costs for the four utilities differ by as much as 28%[a]. These differences are due to differences in underlying hedging strategies and customer service fees, but also appear to be partially driven by some utilities' forecast of spot market prices.

Based on a cursory review of the regulatory filings of the four RRO providers, it appears that RRO providers are employing different hedging strategies for the electricity supply underlying their RRO provision and that these differences in hedging term have an impact on the RRO rate. ATCO is employing some hedged products of various terms and some spot product, which yields relatively low RRO rates in the current market environment. On the other hand, Enmax and EPCOR are employing a relatively higher proportion of longer hedge products, which yields higher RRO rates in the current market conditions.

Ability of new market entrant to compete against RRO will vary between RRO providers

The ability of a new market entrant to compete against RRO will vary between the RRO providers. At current Power Pool prices and available forward contracts, ATCO's RRO with an effective annual cost of $405 for a typical residential customer would be difficult to undercut, whereas Navigant Consulting expects that it would be possible for a new market entrant to undercut Enmax's RRO rate with an effective annual cost of $521 for a typical residential customer and EPCOR's RRO rate for UNC customers with an effective annual cost of $517.

The current competitive offers from Enmax and EPCOR as of January 21, 2002 support this view. The unit costs and effective annual retail energy costs for Enmax and EPCOR are summarized below:

Current competitive offerings as of January 21, 2002

- EPCOR
    - 5.6 cents/kWh for a three-year contract, or $452 each year (including customer service charges of $4.06/month) for a residential customer using 7200 kWh/year.
    - 5.5 cents/kWh for a five year contract, or roughly $435 per year including customer service charges plus 20% of $50 rebate (representing one year's share of the total rebate).
- Enmax
    - 5.7 cents/kWh for a one-year contract or $478 each year (including customer service charges of $5.60/month) for a residential customer using 7200 kWh/year.
    - 5.6 cents/kWh for a two-year contract or roughly $470 per year including customer service charges.
    - 5.5 cents/kWh for a three-year contract or roughly $463 per year including customer service charges.

It is also interesting to note that EPCOR's 5.4 cents/kWh RRO rate for Edmonton customers for the first quarter of 2002 is substantially lower than EPCOR's proposed 6.5 cents/kWh RRO rate for UNC customers, which reportedly includes some two or three year hedge products. This disparity is not reflected in forward price in January 2002 – baseload prices for 2002 and 2003 are trading at approximately the same level. The difference in EPCOR's RRO rate for UNC customers may be partially driven by two factors:

- If EPCOR employed a longer-term hedge strategy when establishing RRO in late 2000 (for 2001), it would have committed to a relatively high contract price based on market expectations of future prices at that time. Assuming a three-year contract and hedge term, RRO customers will continue to be partially exposed to these high prices until the end of 2003.
- Assuming EPCOR entered into a new three year contract at the end of 2001 to cover some component of their RRO supply, it may have faced significantly higher prices than for one or two year contracts assuming a higher risk premium associated with the relatively less liquid three year contracts.

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[a] ($521 annual RRO cost for Enmax/$405 proposed annual RRO cost for ATCO) - 1 = 28%

If either of these two suppositions are true, it suggests that EPCOR customers in UNC territory would be more exposed to underlying prices (and would pay less under current market conditions) through a shorter hedging strategy utilizing contracts with lower risk premiums (until long term liquidity in the wholesale market develops sufficiently such that risk premiums on longer term contracts decrease).

Switching Time and Notice Period

Notice period before customers can switch varies significantly between RRO providers

The notice period that a customer must give before they can switch to a competitive retailer also varies significantly between RRO providers. Enmax customers are allowed to switch after 30 days notice, whereas EPCOR customers in Edmonton must give 90 days notice.

Generally speaking, longer notice periods are not conducive to the development of a competitive retail electricity market. Since market prices can change during the notice period, the longer the notice period, the greater the risk for a competitive retailer offering a fixed price offer to customers. To account for this risk, competitive retailers wishing to provide uniform prices across Alberta will tend to charge higher fixed prices based on the switching period for the RRO provider with the longest notice period (ie, the worst case) which, in turn, makes competitive retailers' offers less attractive compared to RRO rates. Alternatively, if retailers wanted to price as tightly as possible, they could provide unique pricing for each RRO providers' territory that is reflective of the RRO providers' notice period, but this would increase the retailer's marketing and advertising costs, and lead to customer confusion.

Most other competitive retail markets have developed uniform switching times and notice periods for customers. This notice period is typically based on the customer's meter reading cycle (the switch would typically occur on the same day as the customer's normal meter read). Thus for a utility with a 60 day meter reading cycle, the average switching time would be 30 days. For customers with longer meter reading cycles, regulators and utilities have developed estimation routines allowing switching between meter reads that shares risk equitably between the default provider that is serving the customer and the retailer that will be serving the customer.

Exit Fees and Deferral Account Recovery Mechanisms

Exit fees and deferral accounts create customer confusion and make it difficult to compare offers

Enmax and EPCOR do not require customers to pay exit fees on switching to a competitive retailer but do require customers to pay deferral account recovery charges for 2000 pool price deferral and, in EPCOR's case, for 2001 collection shortfall. To the extent that a given customer's deferral account balance recovery obligation stays with them regardless of whether they choose to switch to a competitive retailer, deferral charges should not directly impact on the competitiveness of Alberta's retail electricity market to the same extent that exit fees do. However, they do impact the market indirectly by creating customer confusion.

ATCO and some REAs require customers to pay exit fees to switch

ATCO and some REAs require customers to pay exit fees on switching to a competitive retailer. For example, the minimum exit fee for ATCO customers is a fixed $20 administrative fee plus a fee based on a combination of:

- The customer's share of ATCO's current deferral account (RRO costs less revenues[a]), plus
- The customer's share of ATCO's projected stranded RRO costs.

The recovery of a customer's share of the current deferral account as a lump sum payment on switching can create a significant disincentive for customers to switch. For example, ATCO's deferral charge was 1.6 cents/kWh for customers switching in September, 2001. For a typical residential customer using 7200 kWh annually, these deferral charges would have been approximately $115, plus ATCO's processing fee. Clearly, exit fees of this magnitude would act as a very strong disincentive for customers to switch from the RRO tariff. The deferral account recovery mechanism employed by Enmax and EPCOR, in which these costs are recovered over time regardless of whether they remain on RRO, is more conducive to the development of a competitive retail market.

Based on Navigant Consulting's review of ATCO's RRO application, it appears that ATCO's stranded RRO costs are partially based on actual cost variances (based on the difference between ATCO's actual costs and RRO rates) and partially based on what could be described as a "mark-to-market" charge. If ATCO's RRO rate is lower than the current forward price (ie, market prices are higher than projected), the customer does not have to pay since there are no "stranded" costs. On the other hand, if ATCO's RRO rate is higher than the current forward price, customers are required to pay the difference between these prices multiplied by their annual consumption. This stranded cost recovery mechanism is likely to result in very limited switching by ATCO customers and is not conducive to the development of a competitive retail electricity market in Alberta. For example, if market prices drop in the period after ATCO's RRO rate has been set and competitive retailers provide customers with attractive offers based on these lower market prices, customers may be tempted to switch. However, ATCO's stranded RRO costs would effectively offset most of the savings that the customer would realize by switching. On the other hand, if market prices rise in the period after ATCO's RRO rate has been set, it is unlikely that competitive retailers will be able to provide attractive offers to customers.

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[a] The customer charge could be a credit if the deferral account balance is negative.

Navigant Consulting believes that ATCO's hedging strategy should incorporate sufficient volume flexibility to eliminate the need for these "stranded" cost fees. While the requirement for volume flexibility will increase the RRO rate slightly for all customers, the elimination of stranded RRO costs will increase the competitiveness of Alberta's retail electricity market.

Recommendations Regarding RRO Tariffs

The government of Alberta recently stated that it will not be setting the RRO prices charged by utilities and Navigant Consulting concurs with this approach. However, based on the current disparity in RRO tariffs among the four primary RRO providers and the negative impact that certain provisions of these RRO tariffs have on the competitiveness of Alberta's retail electricity market, Navigant Consulting recommends that the government and the EUB provide greater clarity and specificity in the RRO policies and regulations to ensure that RRO tariffs are 1) more uniform across the province, and 2) more conducive to the development of a vigorous retail electricity market. It is not necessary for the new policies and regulations to specify all of the details of the RRO tariffs to be established by utilities, but the new policies and regulations should be "tightened" sufficiently to achieve these objectives.

Upcoming ATCO RRO hearing good opportunity to debate and finalize RRO changes

While it is too late to revise the 2002 RRO tariff for Enmax and EPCOR, ATCO's upcoming RRO hearing with the EUB provides an opportunity to debate and finalize these new policies and regulations for a least one utility for the remainder of 2002. The necessary changes for the remaining utilities can then be made for 2003 through policy, regulation and rate hearings as necessary. The government could also consider certain of the provisions recommended below for inclusion in any default or "supplier of last resort" tariff established following the elimination of RRO.

The specific aspects of RRO tariffs that should be reviewed by the government in establishing these policies and regulations include:

- The hedging period underlying the RRO price
- The switching or notification period required by customers, and
- The calculation and recovery of any deferral charges.

Should strive for consistency in hedging period used for RRO provision

With regard to the hedging period underlying the RRO price, Navigant Consulting believes the government should strive for consistency in the RRO provisions for electricity customers and default provisions for gas core market customers. The benefits of such consistency are evident in the competitiveness of the UK market, which has driven by dual fuel (gas and electric) retail customers (described in *UK Market Experience and Ofgem's Determination* on page 9).

The proposed one month price readjustment period for gas core market customers would be a reasonable starting point in establishing an appropriate hedging period for supplying RRO customers (see *The Regulated Rate Option* on page 26 for more details on rationale for setting gas market prices). This relatively short period increases "price transparency" by exposing customers to the actual price volatility in both markets and provides an opportunity for competitive retailers to utilize their trading acumen and risk appetite to develop attractive longer term fixed price offerings for customers.

Competitive market now offers long term fixed price contracts, RRO doesn't have to satisfy this need

It is also worth noting that when the current RRO policies were first developed, there were essentially no competitive alternatives available for customers interested in long term fixed prices. Today, however, the retail affiliates of Enmax and EPCOR provide fixed price offers for terms of up to five years. As additional retailers enter the market, it is expected that these retailers will also provide longer term fixed price offers. Hence, the market need for longer term, fixed price offers is being satisfied through the competitive offers of retailers and the RRO tariff does not need to address this market need.

Uniform notice period of 60 days or less

With regard to the switching period, market dynamics and experience in other markets clearly indicate that shorter switching periods are more conducive to retail competition than longer switching periods. Navigant Consulting recommends that the government should strive for a uniform maximum switching period of 60 days or less and that switching within this period should be tied, to the extent possible, to each customer's meter reading cycle. For customers on longer meter reading cycles than the maximum switching period, the switching period could still be based on the average forecast switching period (ie, 30 days for a 60 day maximum) with the customer's consumption based on an estimation routine that equitably balances the interest and exposure of the RRO provider, the competitive retailer and the customer.

Requiring utilities to purchase full requirements (ie, flexible volume) hedging contracts would minimize (or eliminate) the need for deferral accounts which would reduce customer confusion and make it easier for customers to compare competitive offers to their current RRO pricing. Shorter hedging periods (eg, one month) would also help to minimize the magnitude of any deferral accounting.

Minimization of deferral charges and exit fees

Regarding exit fees, Navigant Consulting observes that most successful competitive markets have implemented market rules that eliminate exit fees and allow customers to switch (with a reasonable frequency) at no cost to the customer. Requiring suppliers to procure RRO under full requirements hedging contracts should eliminate most, if not all, deferral charges and all stranded RRO costs (as currently included in ATCO's RRO tariff). The cost of a full requirements contract would be slightly higher than a contract with specified volumes, but any incremental costs would likely be offset by lower transactional and trading costs given the much simpler procurement associated with the shorter term hedging period. Any residual deferral charges could be recovered over a relatively short period regardless of who provides the customer with retail service (eg, RRO or competitive retailer).

Could roll any deferral charges into RRO rate

Another alternative would be to simply "roll" any deferral charges into RRO pricing for the next hedging period immediately following accurate determination of the deferral account balance. While rolling deferral charges into the RRO pricing would not provide for cost recovery from those RRO customers who switched during or after the period in which the deferral account balance was created, short hedging periods would minimize the magnitude of this inequity. On balance, the simplicity of this recovery mechanism for RRO providers and customers and the favourable impact on switching would likely offset the small cross-subsidy from RRO customers to switchers (in effect, this could be seen as a cost to RRO customers for having the option to switch at any time, regardless of whether they exercise that option).

ELECTRIC AND GAS MARKET CONVERGENCE

The RIS committee recommended alignment of the market policies for the gas and electricity retail markets in the following recommendation.

> 1.5 The Government give consideration to aligning the policies for the development of the retail gas market with those of the electrical retail market to facilitate the potential for the emergence of combined gas and electrical Retailers.

RIS recommends alignment of gas and electric retail policies

Given the significance of dual fuel suppliers and proportion of dual fuel customers among switchers in the highly competitive UK gas market, Navigant Consulting believes that the policy alignment recommended by the RIS committee would have a significant impact on Alberta's retail electricity market.

Essentially, the overall objective of government policy should be to ensure that an appropriate policy and regulatory framework is in place to encourage and facilitate the development of effective retail competition in both electricity and natural gas. Because of the convergence that is taking place in the gas and electricity markets, we are seeing the emergence of companies that are involved in marketing both commodities. To facilitate market entry and competitive switching between commodities, the government should strive to provide a uniform regulatory and policy framework that lays out the parameters for the competitive retail marketing of gas and electricity.

The process of aligning the regulatory and policy frameworks governing the gas and electric retail market will need to:

1. Eliminate the fundamental differences that exist between existing natural gas retail market regulations and electricity retail market regulations that significantly impede the development of a vigorous dual fuel retail market in Alberta.
2. Consider eliminating or minimizing other differences and impediments in the existing regulations or in the business environment in an effort to further the development of effective retail market competition.
3. Combine the salient and necessary elements of the existing gas and electricity market regulations while eliminating aspects that are no longer needed or appropriate.

Alignment can be achieved by:

1. ***Eliminating fundamental differences, and***
2. ***Combining key elements of gas and electric regulation into common rules and regulations***

The following sections provide background on and recommendations on these points.

Fundamental Differences That Must Be Addressed

Fundamental differences in regulated rate option, codes of conduct and consolidated billing procedures

There are a number of fundamental differences between the existing gas and electricity marketing regulations that should be eliminated. The most significant of these differences are related to:

- Regulated Rate Option
- Codes of Conduct
- Consolidated billing procedures, and
- Definition of customers receiving price regulation.

These differences are discussed below along with recommendations on policy outcomes that will improve the competitiveness of Alberta's retail gas and electricity market.

The Regulated Rate Option

Hedging contracts of up to three years underly some RRO tariffs

On the electricity side, retailers seek regulatory approval of RRO rates under the *Regulated Rate Option Regulation (AR 132/2001)* under the *Electric Utilities Act (EUA)*. As discussed in the previous section, regulated rates for 2002 are based on underlying hedge products of up to three year duration. These hedged prices reduce the attractiveness of retail competition during periods when the price of electricity is above or expected to be above the RRO price. To the extent that the RRO providers' actual commodity costs are higher than RRO price, this also means that the RRO providers may need to recover these extra costs from consumers in a subsequent periods which leads to deferral charges and customer confusion.

... whereas period for gas core customers is one month

Recognizing the difficulties which establishing regulated rates set for periods as long as a year (or even a quarter) can bring, in its recent Decision 2001-75 with regard to Gas Cost Recovery Rates (GCRR) for ATCO Gas, the EUB opted for regulated prices that would be based on a pass through of wholesale gas costs and set on a monthly basis in order to reduce the need for exit fees and to get consumers more used to fluctuating prices. In that Decision, the Board explained that by reducing the hedge provided to consumers, it was helping to open the door to innovative retailers seeking to grow their market share to structure contracts with terms and conditions that would meet the needs and concerns of their customers. At the same time, the Board pointed out that the need for it to protect gas consumers by providing a hedge from price fluctuations had largely been superseded by the *Natural Gas Price Protection Act (NGPPA)*.

RRO hedging period should be one month, or possibly pass-through

Following the EUB's logic and provided that the absence of protection analogous to the NGPPA does not create significant risk for electricity customers, it is recommended that RRO electricity prices be set on a monthly basis based on a short term forward contract with sufficient volume flexibility to minimize exit fees and deferral accounts. Alternatively, the RRO price could be set monthly based on the forecast Pool Price, plus a small allowance for price volatility and a small administrative fee. Either of these arrangements would provide a margin opportunity for those offering retail services on a competitive basis. However it is done, the discrepancy between the approach now being taken with respect to providing price regulation to gas and electricity consumers should be made as consistent as possible and in such a way that it facilitates rather than discourages the development of retail competition.

Codes of Conduct

Essentially, there are two codes of conduct under the *Electric Utilities Act:*

- The *Code of Conduct Regulation (AR 156/2000)* governs the behaviour of wire service providers and their affiliated retailers. It is meant to ensure that retailers and customers have equal access to regulated services, that retailers have equal access to information disclosed by the wire service providers to their affiliates, and that customers are dealt with fairly by the affiliated retailers. A detailed discussion of this Code of Conduct and recommendations to improve the effectiveness of this code are provided in *Code of Conduct* on page 80.
- The *Electricity Marketing Regulation* contains a "code of conduct" that deals with the way marketers behave and perform in their interactions with consumers. Further, elements of the *Roles, Relationships and Responsibilities Regulation* (*AR 86/2000*) deal with aspects of the relationships between wire service providers, their affiliates and consumers and in effect, constitutes additional guidance with respect to conduct as in s. 7(2) which states *"where a retailer requests an owner to connect or disconnect a customer, the owner must comply with the request"*.

No Code of Conduct governing behaviour of gas utilities and their affiliated retailers

With regard to natural gas, a section of the *Natural Gas Direct Marketing Regulation (AR 186/99)* contains a code of conduct pertaining to the marketer-consumer interface that is essentially equivalent to the similar code contained in the *Electricity Marketing Regulation*. However, there is no code of conduct pertaining to the behaviour of the gas pipelines and their affiliates that contains the salient elements of the *Code of Conduct Regulation* or any aspects of the *Roles, Relationships and Responsibilities Regulation*. This discrepancy needs to be reviewed in the interest of having essentially the same codes of conduct for all gas and electricity transportation facility owners, retailers and marketers.

The current electricity Code of Conduct (AR 156/2000) would be a reasonable starting point for the gas market code of conduct. Even though this code has a number of weaknesses that limit its effectiveness (discussed in *Recommended Enhancements to the Current Code* on page 83), it would be better than the situation that currently exists in the gas market. Given the areas of weakness in the current electricity code, Navigant Consulting believes that whichever of the recommended revisions the government decides to incorporate into the electricity code should also be considered for incorporation into a new gas code of conduct.

Consolidated Billing Procedures

On the electricity side, s. 2(1) of the *Billing Regulation* (AR 290/99) under the *EUA* stipulates that only the retailer is to bill a consumer unless [s. 2(2) and s. 2(4)] the retailer authorizes the wire service provider to carry out billing services and/or to charge customers directly under distribution tariff. The *Billing Regulation* also specifies the items that must be stated separately in the single, consolidated bill that the retailer is responsible for preparing. For these reasons, retail electricity market players in Alberta have invested significant resources in developing an infrastructure for providing bills to their customers (retail consolidated billing).

No regulation stipulating retailer consolidated billing for gas retailers

There is no regulation that stipulates that consolidated billing for gas must be done by the either the retailer or the distributor.[a] In fact, if a consumer chooses to buy gas from an independent retailer, they may be billed for the cost of the gas by the retailer with the gas transportation and distribution charges being billed separately by the distributor (split billing) or the cost of gas may be included on the bill that they receive from the distributor for distribution and related services (distributor consolidated billing or agency billing and collection [ABC billing] as it is known in Ontario). For their part, gas distributors are not anxious for retailer consolidated billing because it would not allow them to maintain a billing relationship with all of their customers. From the gas consumers' perspective, however, it would be most beneficial to receive just a single monthly bill after switching to a competitive retailer.

The provision of retailer consolidated billing (and the resultant customer relationship) also promotes the development and delivery of innovative products and services by retailers, one of the primary objectives of retail competition. Distributor consolidated billing does not allow sufficient flexibility for retailers to offer and bill for multiple products and services in their service offering and, as a result, the development of this important aspect of the retail market is likely to be severely constrained under distributor consolidated billing (the retailers would remain as simple commodity providers without a significant relationship with their customers).

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[a] In Decision 2001-75, the EUB indicated that it supported a single bill system.

Given the important role that receipt of a single dual fuel bill played in many UK customers' switching decisions and the savings that dual fuel bills provide to both customers and retailers, Navigant Consulting recommends that the government align the gas market billing policy with the current electricity market billing policy (ie, promoting retailer consolidated billing) to facilitate the development of dual fuel offerings from energy retailers.

Should require consolidated billing in gas market to facilitate dual fuel offers

Definition of Customers Receiving Price Regulation

Another fundamental difference between the gas and electricity retail markets is that some gas core market consumers are not eligible for the electricity RRO because their electricity consumption is too high. Similarly, some electricity market consumers who qualify for the electricity RRO are not eligible for the protection that is provided to gas core market consumers because of the nature of their activities. This problem could be eliminated by using a uniform energy consumption threshold (either x gigajoules of gas or y kWh of electricity consumed per year, but not both) to define RRO eligibility for both markets or minimized by adjusting the threshold for and definition of the gas core market customers to maximize the overlap between gas core market customers and RRO customers.

Other Differences and Inconsistencies

In addition to the fundamental differences discussed above, there are several other differences and inconsistencies in the rules and regulations governing the retail gas and electricity markets in Alberta. While Navigant Consulting believes that it is relatively less important for the government to address these other differences and inconsistencies than the fundamental differences discussed above, the government should strive to minimize them to the degree possible.

Termination of RRO Eligibility

As it stands, small commercial and industrial consumers will not be eligible for the electricity RRO beyond December 31, 2003; all other RRO eligible consumers (residential and farm) will lose their eligibility at the end of 2005 at which time the electricity RRO will disappear. However, no such "sunset" provision applies to the protection of gas core market consumers. It would be appropriate, therefore, for the government to target elimination of an "RRO" price for core market gas consumers at the end of 2005, simultaneous with the elimination of the electricity RRO. This would mean that all gas and electricity consumers would be without the protection of regulated prices as of January 1, 2006, effectively doubling the number of customers that would be fully contestable. This would likely accelerate the marketing efforts of energy retailers in order to secure customers and market share in advance of the elimination of price regulation.

Consider aligning termination dates for RRO and gas core market customer price regulation

Regulatory Structure and Process

There are a number of differences in the regulatory structure and process pertaining to the natural gas and electricity markets that need to be fixed in order to allow Alberta to move to a uniform regulatory framework. For example, on the electricity side, EPCOR and Enmax, two major RRO providers happen to fall under municipal legislation (being owned by municipal governments). For this reason, their RRO tariffs are not subject to EUB approval, but are approved by their municipalities. This is in contrast to the gas market, where most of the gas retailing is being done by a privately owned company that falls under the scrutiny of the provincial regulator. As a result, the price that most gas core market consumers is determined by the EUB.

Prudential Requirements

Another material difference between the retail marketing of gas and electricity is the prudential that is required of marketers requiring distribution or transportation service. The wire service providers generally require a retailer who is not regarded as sufficiently credit worthy to provide security equivalent to 75 days of the retailer's customers' distribution tariff and related charges. This contrasts with the situation on the gas side where the security that is required in such situations is equivalent to 90 days of service in the case of ATCO Pipelines and "three months of contract demand charges" when dealing with TransCanada Pipelines.

The whole issue of prudential requirements imposed by wires owners and gas distributors of those requiring transportation services should also be reviewed and aligned to the degree possible. As discussed in *Credit* starting on page 61, prudential requirements for retailers needing distribution service differ significantly from one wire service provider to the next. Similarly on the gas side, the prudential requirements vary from one distributor to another.

In a related issue, some companies pay interest on customers' security deposits and some do not.

Inconsistencies

There are numerous minor inconsistencies that the government could address to better align the retail regulations and rules pertaining to electricity and natural gas marketing. The following are but a few examples of matters that will require attention:

- The *Natural Gas Direct Marketing Regulation* [s.8 (1)(iv)] provides a consumer with the right to *"audit"* the records of a marketer. This appears very strong and should be reconsidered. The *Electricity Marketing Regulation* [s.9 (a)(v)] provides a consumer with only the right to *"inspect"*.

- The *Electricity Marketing Regulation* states [s.10 (1] that a marketing agreement *"cannot exceed a term of 5 years"*; the *Natural Gas Direct Marketing Regulation* does not provide any such constraint. This difference may not be material, but it is another example of an inconsistency that needs to be addressed.

- The license fees required of gas and electricity marketers is the same. However, the security that independent gas marketers and registered electricity marketers must post with the government appears to be at the discretion of the "director" employed by the government. Moreover, there is considerable concern that the requirement that a $1 million dollar bond be posted is excessive and prohibitive. The EUB in Decision 2001-75 noted that a bond of $250,000 may not be adequate and that a more flexible approach to retailer bonding may be appropriate.

- The *Electricity Marketing Regulation* provides [s. 9(c)(i)] that a consumer may request, "based on up to three bills from the previous year" that a marketer provide a statement of what the amount of his bills would have been if the electricity had been provided under the terms of the proposed contract. This "right" is not reflected in the *Natural Gas Direct Marketing Regulation*. The approach appears useful to extend to the retail gas market.

- The Market Surveillance Administrator (MSA) looks out for the interests of electricity consumers, but there is nothing comparable on the gas side. To remedy this situation, the government should consider either 1) removing the MSA from the jurisdiction of the Power Pool Council (which is solely electricity-focused) and expanding the MSA's responsibility to cover protection of gas customers' interests as well as those of electricity customers, or 2) establishing an agency with similar responsibilities as the MSA for the natural gas market.

Integrating the Regulatory and Legislative Frameworks

Once the fundamental differences between the gas and electricity regulations have been addressed and other minor differences and inconsistencies have been minimized or eliminated, the government should strive to integrate the pertinent legislation and regulations governing the retail gas and electricity markets to the greatest extent practical. The departure from a multi-regulatory world to a single piece of legislation that guides electricity and gas marketers and distributors, protects consumers, and fosters retail competition will involve eliminating existing barriers and obstacles.

After alignment of regulations, could integrate into new, combined electricity-gas legislation

Navigant Consulting is aware that the Government is in the process of amending the *EUA* in order to embed aspects of the many regulations that have been made under the existing Act to facilitate electricity deregulation and restructuring in the province. It is recommended that regulations and aspects thereof that are directly related to and important for retail competition, such as the *Billing Regulation* and the *Electricity Marketing Regulation,* not be embedded in the proposed grander *EUA* but, rather, incorporated into combined electricity-gas legislation that has been suggested. In this regard, Alberta Energy should undertake a review to determine the feasibility and complexity of integrating natural gas and electricity legislation and regulations into a comprehensive package.

WHOLESALE MARKET

A well functioning competitive wholesale market is a necessary requisite to a competitive retail market. The linkage between wholesale and retail markets is critical in terms of the benefits received by consumers and for promoting competition among suppliers.

Consumers realize cost savings in the electricity market primarily as a result of competition in the wholesale sector. Moreover, the greatest magnitude of cost savings for consumers is likely to occur in the wholesale sector. Retail competition is needed to ensure that cost savings achieved in the wholesale market are passed on to retail customers, and in particular, that savings do not accrue solely to Energy Service Providers.

Retail market competitiveness is dependent on well-functioning wholesale market

Retail market competitiveness is affected if wholesale markets are not functioning in a competitive manner. Uncompetitive and poorly functioning wholesale markets represent a barrier to entry for potential retailers that do not have physical or financial positions in the market that allow them to avoid these market problems. Competitive wholesale markets should eliminate the need for retail marketers to own physical assets or entitlements in order to provide competitive retail offerings to consumers. A viable and competitive wholesale market assures retail competitors of the opportunity to obtain adequate supplies of competitively priced electric power.

RIS wholesale market recommendations

The RIS Report made a number of recommendations concerning the wholesale market. These appear in general in Section I and specifically in Section II. The RIS recommendations are indicated below:

Section I

(ii) The Government not implement policies that result in direct intervention in, or distortion of, the marketplace.

(iv) The Government support the decisions of the Power Pool of Alberta in relation to its process of consulting with stakeholders and subsequently implementing the rules and structure governing the Power Pool price determination (and the future existence of uplift) and to the extent changes are contemplated, such changes be finalized as soon as possible.

Section II

(i) The Government continue to encourage developers of additional generation capacity in the province by providing a sound policy structure that encourages companies to invest in new generating capacity by fast tracking the regulatory approval process for new project development. RIS recognizes that the Government is already doing a lot in this regard and encourages the Government to identify and address remaining residual uncertainties which could act as barriers to additional generating capacity.

> (ii) While the RIS realizes there is a committee currently designing the plan regarding MAP2 and the unsold PPA's, such committee [should] take into consideration the following particular aspects of a MAP2 [auction] and the unsold PPA's which would assist in the development of the retail market:
>
> The Government should outline the long-term policy decision and the implementation plan for the MAP2 auction/PPA sale in order to remove the uncertainty surrounding this issue. (This would include the Government producing an early design of the MAP2 auction, finalizing the process and the go-forward plan and effectively communicating the plan well in advance of the auction itself.) The date of the auction would then be set for later in the year to allow sufficient time in advance of implementation to enable the parties to adequately prepare for the auction.
>
> If such auction involves the sale of forward contracts for implementation early in the New Year, then such sale should be held at a time so as to allow adequate time for implementation of the new arrangements.
>
> Participation in MAP2 should not be limited to consumers (or designated end user's consumption) only.
>
> There should be capacity limits on participation by any one party to prevent any one (or a small group) from dominating the market. However, consideration should be given to RRO providers to accommodate their RRO requirements.

Navigant Consulting supports the recommendations of the RIS Report and believes that implementation of these recommendations will facilitate the development of both wholesale and retail electricity markets in Alberta. Navigant Consulting recognizes that the Retail Issues Sub-committee was constituted during a period of volatile and very high wholesale prices in conjunction with the transition to a new market structure. Since the winter of 2000/01, the Power Pool Price has fallen dramatically for a number of reasons including ; increased generating capacity, lower natural gas prices, a warmer than normal winter and lower demand due to the economic slow-down.

The following sections discuss the RIS recommendations concerning the wholesale market and a number of related and important issues that were not specifically mentioned by the RIS but arose during discussions with various market participants. Effectively dealing with wholesale market issues will facilitate the development of new generating capacity resulting in reduced price volatility, mitigation of the "boom/bust cycle" of generation supply surplus and deficiency, and a reduced likelihood that consumers will pay higher electricity prices over the longer term.

Wholesale Market Issues

Key wholesale market issues

Discussions with RIS members and other industry stakeholders identified a number of issues related to the wholesale electricity market. These issues are concerned primarily with:

- Regulatory uncertainty;
- Pool Price determination;
- Unsold Power Purchase Arrangements; and
- Market liquidity.

Although there has been considerable progress made in developing a workably competitive wholesale market in Alberta, these issues continue to affect the performance of Alberta's wholesale market. The impact of these issues is discussed in greater detail in the following sections.

Regulatory Uncertainty

Market participants were waiting for policy decisions that would impact wholesale market

The RIS Report noted that market participants were waiting for Government policy on a number of key issues which would affect their business decisions. Navigant Consulting notes that most of these issues, with the exception of MAP2 and the unsold PPAs, have been successfully dealt with over the past year. MAP2 and the unsold PPAs are discussed in greater detail later in this section.

Regulatory uncertainty has the effect of increasing overall business risk and potentially impacting business arrangements entered into by market participants. In addition, regulatory uncertainty may affect consumer prices as a result of firms attempting to mitigate the increased business risk. Risk is an important factor in the wholesale electricity market due to its capital intensive nature requiring large expenditures for generation and transmission infrastructure. Ultimately the business decision to make significant capital investment requires stability in the market environment, particularly with respect to legislation, regulations, and policies.

Power Pool Price Determination and Price Certainty

In conjunction with the expiry of the Pool Price Deficiency Correction Regulation (PPDR), the Power Pool implemented procedures to better align the Alberta real-time market with energy markets in neighbouring jurisdictions. This change was made due to the inability of importers to respond to intra-hour dispatches. However, a possible consequence of the change to the price determination rules pertaining to exports and imports may be the distortion of price signals from adjacent markets which could discourage the development of new electricity generation and transmission capacity in the province.

Recommendation on Pool Price Certainty and Determination

Government should complete its efforts to ensure sound policy and stable regulatory structure for wholesale market

Navigant Consulting encourages the Government to complete its efforts to ensure a sound policy and stable regulatory structure for the wholesale electricity market in Alberta. In particular, Alberta Energy should continue to encourage developers to build new capacity by simplifying the regulatory approval process promoting the development of new generating capacity in the province, and in particular, implementing policies and regulations which would support improving market liquidity. Supportive regulations in these areas will have the benefit of encouraging the construction of new generation and transmission infrastructure. The long-run success of restructuring in Alberta may depend on the level of excess generating supply.

Navigant Consulting also encourages the Government to identify and address remaining residual uncertainties, which could act as barriers to achieving a workably competitive wholesale market. Removing regulatory uncertainty from the wholesale market will have a positive spillover effect on the retail market by encouraging market entry and competition. Currently, Alberta is in a period of low energy prices and surplus supply. Furthermore, there is a perception among market participants that the low price environment will continue for at least the next few years. The timing for implementing any changes to improve the existing market structure is excellent. Generally, it is easier to implement changes in a low price, stable market than in a high price, volatile market.

Unsold Power Purchase Arrangements

The RIS Report identified the unsold PPA's, ie., Clover Bar, Genesee and Sheerness, as a critical wholesale market issue. In addition, some questions were raised as to whether the Balancing Pool is an appropriate party for managing and dispatching the unsold PPA's.

Unsold PPA's create uncertainty in the wholesale market

RIS members indicated that there is a need for certainty around unsold PPAs due to the influence they have over the wholesale market. In addition, RIS members expressed concern about a number of specific issues related to the unsold PPA's including: (1) the potential for the Balancing Pool to exercise market power[a]; (2) ensuring that consumers receive a fair residual value from the sale of the three unsold PPA's; (3) ensuring an adequate timetable to allow potential bidders to prepare for an auction; (4) participation in MAP2 should not be restricted to consumers and should be open to all market participants[b,c];

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[a] In effect the Balancing Pool exerts significant influence over the wholesale market due to its market share and transparent offer strategy.

[b] Subject to minimum requirements such as creditworthiness.

[c] Retailers are, in effect, market makers and their participation will help to ensure that retail market competition develops. In addition, participation by Retailers will provide an

(5) limit capacity that can be held by any one market participant to eliminate concerns about cornering the market; and (6) mitigate the potential for market power abuse, particularly related to Clover Bar.

MAP2 Auction

During 2001, the Balancing Pool initiated consultation with stakeholders in order to develop guiding principles for the MAP2 auction to be held in the mid-2002 time frame, began management of its capacity as a portfolio, and entered into an agency arrangement with Candela Energy Corporation[a] to handle the Balancing Pool's participation in the marketplace.

Balancing Pool evaluating unit contracts and physical strips for MAP2

The Balancing Pool is currently developing two derivative contract options including unit contracts and physical strips. The contracts would have physical dispatch rights and contract terms expected to range from three to five years. Clover Bar would be divided into four unit contracts of 157 MW per contract, each with dispatch rights. Genesee and Sheerness would be separated into physical strips consisting of 3 x 100 MW per unit energy only contracts and 1 x 80 MW per unit ancillary services or energy contracts.

There are a number of advantages regarding the derivative contracts. In particular, no changes will be required to the underlying Power Purchase Arrangements. Navigant Consulting believes the sale of physical dispatch rights will significantly enhance market liquidity. Furthermore, unit contracts for Clover Bar, Genesee and Sheerness, in conjunction with the appropriate holding restrictions, will help to ensure that critical price-setting portions of the supply curve are controlled by a number of competing parties.

The overall impact should be a more competitive wholesale market with an increased likelihood that market participants will be able to recover capital investments. Moreover, improving competition in the wholesale market will help create opportunities for additional marketers in the retail sector.

The MAP2 auction will not be a permanent solution and it may be necessary to conduct future auctions. It is expected the marketability of the unsold PPAs will continue to improve in the future as the unsold PPAs approach the end of their contract terms.

Role of the Balancing Pool

Several RIS members and industry participants expressed concern over the perceived independence of the Balancing Pool and the potential ability of the Balancing Pool to exert market power. A successful MAP2 auction would

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opportunity for a new Retailer to secure the supply necessary to offer products and compete for consumers' business.

[a] Candela is an independent, Alberta based electricity trading and asset management company.

reduce concerns by market participants. If the MAP2 auction is not considered a success, it may be necessary to revisit the issue of whether the Balancing Pool should become an organization separate and distinct from the Power Pool of Alberta.

Recommendation on Unsold Power Purchase Arrangements

Navigant Consulting supports the efforts being made by the Balancing Pool to remarket the output of the unsold PPAs that it holds and to restructure these PPAs so as to increase their overall marketability.

Navigant Consulting believes that the results of a successful MAP2 auction in conjunction with other strategies such as increasing market diversity and access (discussed below) will increase the number of wholesale market participants and achieve the critical mass necessary for more robust physical and forward markets.

Market Liquidity

The RIS Report identified "the lack of wholesale market liquidity" as a key issue affecting the retail market. Some of the impacts of limited wholesale market liquidity include:

- Increased wholesale market risks for Retailers;
- Limited supply options available to Retailers;
- Inhibited development of the retail market as Retailers are unable to develop a diversified supply portfolio; and
- Reduced confidence that pricing is a function of competitive interaction among a reasonable number of wholesale suppliers.

Increasing market liquidity will provide Retailers with a higher level of confidence that they will be able to access competitively priced supply. In addition to resolving the unsold PPA issue discussed above, there are a number of other options for increasing market liquidity such as continuing to support the development of forward markets to help mitigate Pool Price volatility, ensuring a stable regulatory and overall policy environment, encouraging and facilitating new generation, increasing market diversity and access, and resolving transmission infrastructure problems.

Increasing market liquidity will give retailers confidence to access competitively priced supply

Market Price Volatility

During the later part of 2000 and the first half of 2001, the Alberta market experienced significant price volatility.[a] To a certain degree, this price volatility is structural in nature and is characteristic of a pool-based spot market where the market is cleared based on the marginal offer and bid.

In addition, a number of other factors also contribute to the price volatility experienced, including:

- electricity is non-fungible commodity and there is no significant hydroelectric storage capability in Alberta;
- the Alberta market is relatively small with limited interconnections to adjacent markets;
- the reliance of critical price setting capacity on natural gas which is also highly volatile;
- a significant portion of load, ie., the oil and gas sector, can be adversely impacted by factors outside the electricity market which can affect the level of power prices; and
- most customers' demand is relatively inelastic as customers have few alternatives to high spot prices and are unable to significantly reduce their demand.

Forward markets that enable consumers to hedge against future price changes are an effective means of mitigating the impact of price volatility. A potential benefit to consumers of an active forward market is that, to the degree that generators have sold forward, their ability to benefit from higher prices as a result of a capacity withdrawal strategy is significantly reduced.

One way to reduce price volatility is to ensure continued development of forward markets

Alberta has experienced a significant increase in the volume traded in the forward markets, with a reported fivefold increase in volume between the first quarter of 2001 and the third quarter. One factor that could inhibit full development of effective forward markets in Alberta is that it is relatively small and thinly traded due to the small number of market participants. The upcoming MAP2 process could promote further development of forward markets in Alberta.

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[a] Price volatility dereased significantly in the second half of 2001 due primarily to increased generating supply, lower natural gas prices and reduced economic activity.

Market Diversity and Access

The Alberta market is relatively small compared to other markets in North America. This is further complicated by the fact that Alberta is weakly connected to the Pacific Northwest and the WSCC which limits access to these ex-Alberta markets.

Alberta market is small compared to other markets in North America

Approximately 7,500 MW of new generation capacity is currently being proposed for the Alberta market. The proposed capacity would be placed in operation over the next five to six years. The proposed capacity is, however, far in excess of Alberta's load requirements, at least for the foreseeable future. In addition, proposed capacity additions tend to be "lumpy" in nature and do not necessarily correspond to load growth, which tends to grow in a more uniform manner.

A number of project sponsors have indicated that proceeding with their projects is contingent on access to export markets. Without such increased access these project sponsors recognize that they will have to bear the risks of building a project in a market that is overbuilt and may decide not to pursue the project. This is a critical issue because most industry analysts believe that surplus generation capacity is essential in order to successfully restructure an electricity market. Surplus generating capacity has the potential to significantly benefit consumers by helping to ensure that prices remain competitive in the Alberta market. Moreover, improving access to other markets may have a number of other important benefits such as smoothing the "lumpiness" of new capacity additions which could help improve the financial viability of projects, offsetting capacity reductions due to plant retirements, moderating the potential "boom/bust" cycle which tends to characterize the supply side of commodity markets, and effectively pre-building capacity for the domestic market. Energy from pre-built capacity could be sold into export markets until such time as the domestic market required it. This approach may have the benefit of significantly reducing the risk that Alberta consumers will not have the necessary capacity available when they need it most.

Transmission System Congestion and Expansion

The development of a workably competitive wholesale market in Alberta will also depend on the availability of adequate transmission capacity and reasonable terms and conditions for service. New generation capacity will not be built unless supply can flow to market. Transmission issues currently facing the Alberta electricity industry include: (1) how to resolve future congestion on the North-South Corridor between Edmonton and Calgary as new projects come on line in the Edmonton and Ft. McMurray areas of the province; and (2) whether to expand the transmission system to accommodate exports to the United States, particularly the U.S. Pacific Northwest.

There are a number of critical issues concerning how to resolve this transmission congestion and how (if at all) to expand the transmission system to accommodate exports including: (1) who will pay for the costs of expanding or upgrading the transmission infrastructure; (2) how the costs will be allocated between customer groups; (3) appropriate tariff methodology, i.e., rolled-in versus incremental tariffs; and (4) access to land for construction of an expanded transmission system. These are all contentious issues given the divergent views of stakeholders.

Major generation and transmission projects that are affected by these critical issues are unlikely to proceed until these issues are resolved.

Recommendation

Navigant Consulting recommends that Alberta Energy actively support the efforts of the industry to develop and implement policies and regulations to resolve issues related to market diversity and access and transmission congestion and expansion. Resolution of these issues will significantly improve market liquidity and foster the development of competitive wholesale market with significant benefits of the retail sector.

Resolve issues related to market diversity and access and transmission congestion and expansion

LOAD SETTLEMENT AND BUSINESS PRACTICES

Settlement is the number one issue with respect to developing a competitive retail market in Alberta

The RIS Report identified a number of issues concerning Load and Financial Settlement and Business Practices. RIS Committee members, Cap Gemini Ernst & Young (CGEY) and third party market participants were interviewed to obtain their views on these issues and to determine what action, if any, should be taken. The majority of Committee members indicated that Settlement is the number one issue with respect to developing a competitive retail market in Alberta. In particular, RIS members were also concerned with business practice issues related to Settlement as opposed to the actual mechanics of the settlement process itself.

RIS Issues Related to Load Settlement

The RIS Report identified a number of specific issues related to Load Settlement including:

- Lack of a mechanism to correct known settlement errors made during the "initial settlement";
- Lack of consistency in the functionality and integrity of the various load settlement systems; and
- Lack of timely settlement.

The Retail Issues Subcommittee contends that these issues are significant because they "create barriers to the development of the retail market by making it difficult, onerous, and costly for Retailers and Self-Retailers to gain access across the service areas". [a] In addition, RIS members are concerned that these issues are discouraging Retailers from participating in the market and consumers from switching to alternative supply arrangements.

RIS Issues Related to Business Practices

The RIS Report also identified a number of issues faced by Retailers and Self-Retailers in gaining access to and across the various distribution systems. These issues include those related to the liability between Retailer and Wire Services Provider (WSP) with respect to the consumer, terms and conditions in the access agreements, types of service available, metering, billing, settlement, business practices and the standards and general day to day operating procedures.

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[a] RIS Report, p. 20.

Specifically, WSP/Retailer issues identified by the RIS Group concerning business practices include:

- Standard business practices vary across the various WSPs, Owners, REAs and Municipal Utilities;
- Lack of consistency across the various WSPs in their contractual terms and conditions, obligations, liabilities, information and information systems; and
- Lack of timely and accurate site-specific customer consumption/settlement data;
- Inadequacies in the current level of metering and data collection;
- Timing and process of enrolling and de-enrolling new customer sites;
- Lack of penalties for WSPs and Load Settlement Agents (LSAs); and
- Lack of a predefined dispute resolution mechanism.

RIS Recommendations Related to Load Settlement and Business Practices

The RIS members developed a number of recommendations designed to resolve the identified issues. The RIS Report contains the following recommendations:

RIS recommendations on settlement and business practices

3.1 The Government make a policy decision to establish a clear and uniform set of business standards, applicable to Retailers and Self-Retailers, for the WSPs, Owners, REAs and Municipalities across the entire province to ensure standardization of the distribution terms and conditions. While the objective is to have standardized T & C's where it is reasonable to do so, there needs to be sufficient flexibility to accommodate the unique circumstances that are encountered by each WSP, Owner, REA, and Municipality. It is noted that this recommendation does not include standardization of rate setting methodology across all service territories.

A clear and uniform set of business standards should also be established for the LSA functions. For example, all LSAs should be subject to the same requirements to provide site-specific settlement information.

3.2 Once the policy decision has been made to standardize Retailer and distribution access terms and conditions across the province in the service territories of each WSP, Owner, REA, or Municipality, the task of how to implement the details of the policy and the assessment of the implications thereof, be entrusted to a suitable consultant, or qualified AE officials, for immediate examination.

3.3 There is a need for a speedy and accurate enrollment/de-enrollment of customers in order to minimize the Retailer exposure to risk.

Both WSPs and Retailers must work together with customer authorization to ensure sites are enrolled correctly and in a timely manner, sharing the liability for accurate enrollment. Retailers (new or Default Supply) must be obliged to provide customers with their site ID and the WSP should verify the accuracy as per a customer's request. Any sites mistakenly enrolled should be fixed without any repercussions to the customers involved.

3.4 For the WSPs and LSAs, there should be minimum standards for operating performance and penalties for failure to comply with the minimum standards.

In areas where disputes arise, there should be an independent and impartial means of dispute resolution. This mechanism should be predefined (preferably contained within the standard terms and conditions), simple, expeditious and low cost, with built-in incentives for the parties to resolve disputes.

3.5 For Retailers to accurately bill their customers they need complete data, which includes both site-specific wires and energy billing determinants. Specifically Retailers require LSAs to provide detailed hour-by-hour consumption/settlement data, either estimates or actual as applicable, for each site. For Retailers to replicate and audit the wires billing on behalf of their customers they require WSPs to provide complete billing determinates such as ratchet levels.

RIS recommends that the Government continue to support the current initiative of the Business Issues Group, whose mandate, RIS understands, includes resolution of the LSA issues and whose work to resolve such issues is supported by an independent consultant. RIS further recommends that this review should determine appropriate standards of performance for accuracy and timeliness of information, current metering and data gathering technology, and a review of "best practice" in other jurisdictions. (This jurisdictional review should include a review of the requirements for utilities to test and have their systems certified by a specified date by their respective regulators with respect to their accuracy and compliance with the relevant standard.)

CGEY Settlement and Business Practice Issues

CGEY identified a number of issues which are consistent with similar issues identified in the RIS Report. These Settlement or related business practice issues include: (1) customer enrollment/de-enrollment; (2) Site-ID Catalogue; (3) detailed specifics of load settlement (i.e., lack of timely, accurate and complete data and, in particular, the inability to change initial settlement errors); (4) lack of standard business practices for LSAs caused by different interpretations of the Settlement System Code and leading to a diversity of terms and conditions among LSAs; (5) lack of meter reading and load settlement performance standards; (6) inability of the Retailers to identify discrepancies in their daily load allocation due to a lack of site level detail (lack of transparency); (7) lack of monitoring, enforcement and recourse within the code; and (8) Site-ID Catalogue ineffectiveness.

CGEY Recommendations

Recommendations from CGEY's Interim and Final Reports pertaining to the retail market are described below in terms of Load and Financial Settlement Process, Settlement Management Function, and Settlement Related Functions and Processes.

Load and Financial Settlement Process

CGEY recommends development and implementation of operating and performance standards

The critical element in the area of Settlement concerns the development and implementation of operating and performance standards. Performance standards are required for Meter Data Managers (MDMs) and Load Settlement Agents (LSAs). In addition, CGEY recommends that performance standards will be required for other market participants. Uniform Business Practices are needed to remove ambiguities within the Settlement Code and, where appropriate, uniform business practices should be applicable to all market participants across the retail market. CGEY also recommends including roles and responsibilities for all market participants in the Settlement Code.

CGEY recommends that the LSAs need to improve information transparency, particularly in the area of site level detail. LSAs should make site level detail available to Retailers who should be provided with a mechanism to retrieve (pull) data when or if they choose.

Settlement Management Function

... expansion of MSA's role

With respect to the lack of a forum for resolving Settlement related disputes, CGEY recommended that the role of the Market Surveillance Administrator (MSA) should be expanded to include facilitation and resolution of settlement related issues. The MSA has in fact already started to get involved in settlement related issues. The MSA recently investigated a complaint received from the Industrial Association of Southern Alberta on August 31, 2001 concerning a settlement issue related to consumers' concerns that they were overcharged for electricity and that they would not receive appropriate refunds from their retailers in a timely manner, if at all. The MSA subsequently filed a report and recommendation with the Power Pool Council.

Currently, contract terms and conditions are established by the WSPs in the absence of operating and performance standards and uniform business practices. Once these are established and implemented, it is expected they will be incorporated by reference in the service contract terms and conditions. It will then be necessary to have a process for dispute resolution and enforcement. CGEY recommended the potential for an arbitrator to provide binding dispute resolution and an enforcer to levy penalties for infractions.

Settlement Related Functions and Processes.

The Site-ID catalogue does not provide enough information to effectively differentiate Site-Id's and thus accurately enrol a site. A related issue concerns customer enrollment and switching. CGEY reviewed enrollment practices in other jurisdictions in order to determine an appropriate solution. A common practice identified by CGEY is the need for customer confirmation regarding enrollment. This can occur either by customer authorization before enrollment, in order to release required data for confirmation, or customer confirmation (through cancellation) upon notification. In the short-term, CGEY made several recommendations in this regard and in particular suggested that written customer authorization on a pre-enrollment basis, so that the LSAs can release customer specific information to the retailer for confirmation of customer and Site-ID. For the purpose of facilitating enrollment, changes to Section 13 (2) (q) of the Electricity Marketing Regulation may be necessary. In the longer term, CGEY recommends a review of the enrollment process to determine if there are more effective means of attaining customer authorizations with potentially different mechanisms for end-use customers versus business customers.

The BIG working group identified concerns around the lack of standardization of the business transaction content, format and process. CGEY recommended that a working group review the areas of standardization of business transactions and the process for their communication.

Discussion and Recommendations on Load Settlement and Business Practices

Navigant Consulting supports BIG and CGEY recommendations

Navigant Consulting supports the recommendations concerning Settlement and Business Practices proposed by the Retail Issues Subcommittee and Cap Gemini Ernst & Young. There is a significant level of consistency and compatibility in the work done by both groups. It is Navigant Consulting's understanding that the Alberta Government has accepted the recommendations of CGEY and these recommendations are currently being implemented.

Navigant Consulting is of the view that implementation of the recommendations will help facilitate the development of a competitive retail market in Alberta. CGEY expected it will take between 12 and 18 months to fully implement the recommendations in its Interim and Final Reports. In particular, Navigant Consulting strongly supports the development of performance standards for business practices and operating procedures, penalties for non-compliance and a dispute resolution process.

There are a number of issues related to Load and Financial Settlement and Business Practices that require additional comment. In its Interim and Final Reports, CGEY covered most of the issues identified in the RIS Report.

However, issues that were not directly addressed in some manner by CGEY include 3.1.1 WSP - contractual terms and conditions (RIS Report, page 20), and 3.2.4 - settlement timing (RIS Report, page 21). In addition, CGEY also identified a number of issues which it considered out-of-scope relative to the established terms of reference for the Settlement review project. CGEY, however, included mention of these issues in its Interim and Final Reports due to their importance related to the development of a competitive retail market.

CGEY also identified several "out of scope" issues

The out-of-scope issues identified by CGEY include: (1) diversity and complexity of distribution tariffs; (2) lack of standards across WSPs for tariff calculations, load data used to calculate tariffs and invoicing and payment terms; (3) lack of transparency between WSPs and their retail affiliates; (4) exit fees; (5) no forum for addressing non-settlement issues such as tariffs, WSP invoices, and compliance with the Roles, Relationships and Responsibilities Regulation; (6) lack of prudential standards across WSPs and with the Pool; and (7) inadequacies in the Retailer – WSP/LSA relationship pertaining to communication, Site-ID problems, lack of a mechanism for initiating and/or challenging the term and conditions of the municipally regulated utilities and the lack of a mechanism to allow energy marketers to accept copies of consumer invoices when provided with the proper written authority.

In terms of assessing these issues, we relied on a report prepared by Navigant Consulting, Inc. for the Edison Electric Institute entitled ... *Uniform Business Practices for the Retail Energy Market.*[a] This report, prepared in conjunction with 98 major electricity market participants in the United States, developed uniform business practices which would be applicable to both the electricity and natural gas markets. Topics covered in the report include: customer information, customer enrollment and switching, load profiling, billing and payment processing, customer inquiries, creditworthiness, supplier licensing, disputes between the Utility (i.e., WSP) and the Supplier (i.e., Retailer), market participation interaction, and unbundled metering. The report is available to the public at www.ubpnet.com.

WSP Contractual Terms and Conditions

Lack of consistency across the various WSPs in their contractual terms and conditions

The RIS Report indicated one of the issues that is "creating barriers" to the development of the retail market concerns the lack of consistency across the various WSPs in their contractual terms and conditions, obligations, liabilities, information and information systems". The current regulations governing the electricity market in Alberta are permissive in nature and have allowed WSPs to develop different commercial and operating arrangements, each requiring its own service contract. This results in duplication of effort in terms of business, risk and legal analysis, requirements for customized business systems, and increased difficulty regarding risk management.

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[a] Navigant Consulting, Inc. "*Uniform Business Practices for the Retail Energy Market*", prepared for the Edison Electric Institute, November 22, 2000.

Differences among the WSP contract terms and conditions of service were considered outside the scope of CGEY's report. However, the diversity of contract terms and conditions is inefficient and results in duplication of effort, reduced potential to realize economies of scale, increased chance or errors, and generally, and inconsistency in business arrangements which are essentially for the same service.

While each of the WSPs will have unique characteristics that require unique contract terms and conditions there are, however, many common features that lend themselves to a standardized contract. To accommodate the unique characteristics of WSPs and yet achieve the simplifying contractual arrangements through standardization, contracts could be divided into two sections: one section to deal with unique commercial arrangements (including distribution, service rates, and potential customer [or Retailer] capital contributions) and the other section to handle standard terms and conditions. This is a contract structure that has been used successfully in other industries such as natural gas marketing and contacts for electricity swaps. An outline for a Master Service Agreement between a Utility and a Supplier (i.e., Retailer) was proposed in the Navigant Consulting Edison Report.[a] In addition, a standard service agreement to establish the contractual relationship between distributors and retailers has been adopted for the Ontario electricity market.[b] The Navigant Consulting outline attempts to address all of the general issues surrounding the contractual relationship between a Utility and a Supplier. Specific or unique details such as rate tariffs would be handled in a separate section or appendices dealing with the unique commercial or operating arrangements.

A specific issue that was raised by some RIS members concerns who is responsible for customer contributions related to the cost of interconnecting to the WSP's electric system. Historically, end use customers have been responsible for a portion of the capital costs associated with connecting to the electric grid (ie., customer contribution). Capital contributions are generally paid by consumers in the form of a lump sum payment.

In a restructured Alberta retail market, Retailers have become involved in the process of receiving payments from consumers and making payments to WSPs. Typically, distribution companies look to the Retailer and not consumers as the party responsible for on-going payments for distribution service. Distributors take the view that it is up to Retailers to collect payment from their customers and any shortfalls are the Retailer's responsibility. The concern of some Retailers is that they may be held to a higher standard of service than otherwise appropriate. In addition, the Retailers expressed a concern that there is no uniformity among WSPs in terms of how this issue is handled.

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[a] Navigant Consulting, Inc, "Uniform Business Practices for the Retail Energy Market", prepared for the Edison Electric Institute, November 22, 2000. www.ubpnet.org.

[b] "Appendix C – Service Agreement Retail Settlement Code", Ontario Energy Board, December 21, 2001. www.oeb.gov.on.ca under Codes/Rules/Guidelines.

A cursory review of distribution tariffs indicated that the general principle is that distributors pay up to a certain amount and customers fund the balance of the total capital cost of interconnection. The review also indicated significant differences in terms of customer contribution levels, the length of time for payment of the distributor's portion (ie., minimum contract demand) and the customer's obligations to the extent that a customer may experience difficulty assigning service contracts to third parties.

Recommendation on Contractual Terms and Conditions

Navigant Consulting recommends that the Alberta Government amend the Electricity Marketing Regulation to include a provision requiring standardized contract terms and conditions between Retailers and WSPs.

Amend regulation to require standardized contract terms and conditions between Retailers and WSPs

With respect to capital contributions, end-users are ultimately responsible for capital contributions related to the cost of system interconnection. However, customers should not be unreasonably prevented from assigning these contractual obligations to other parties (ie., sale of a property). The terms and conditions for capital contributions should, to the extent possible, be uniform between WSPs. In addition, distribution service agreements should not attempt to make Retailers liable for non-payment by customers.

Standardized contract terms and conditions could be developed by establishing a working group of industry participants. A law firm experienced in electricity industry contracts would be retained to develop a proforma agreement using the Master Service Agreement as the initial starting point for discussion.

Settlement Timing / Meter Reading Cycle

The RIS Report raised the issue of the length of time it takes to achieve Final Settlement. The Report stated: "The final load settlement arrangements are difficult, slow and cumbersome. The slowness of the Final Settlement arrangements make business and cash flow planning difficult for Retailers and customers alike." (Specific RIS Report issue # 3.2.4). This is a two-part issue that also concerns customer financial responsibility related to switching. (See discussion under Retailer of Record.)

CGEY discussed but did not make a specific recommendation concerning a shorter meter reading cycle. It is Navigant Consulting's understanding, however, that CGEY is currently developing a "business case" to assess the benefits/costs of changing the existing 6-month meter reading cycle to a 3 or 1 month cycle.

The current meter reading performance standard for the Settlement System is to have 98% of the metered load measured within 6 months. EPCOR and ENMAX meter reads are carried out on a bi-monthly and monthly basis respectively. However, the meter reads by ATCO Electric and UNC are less frequent due to the rural nature of their customers. The electricity market would benefit considerably in terms of improving financial certainty by changing the current 6-month meter reading cycle to a shorter cycle.

6-month meter reading cycle may be deterrent to the development of a competitive retail market

It is the view of Navigant Consulting that the 6-month meter reading standard is a deterrent to the development of a competitive retail market. Electricity intensive businesses require more timely and accurate information for management and operating purposes. Accurate consumption information is required for performance based and demand side management contracts. Moreover, a closer matching of consumption and price will improve energy management decisions on a current basis.

Other alternatives include varying the settlement cycles for different customer classes and using binding estimates. For example, a one-month settlement cycle could be used for the bi-monthly and monthly meter read customers. Customers with less frequent meter reading would remain on the current settlement system. The intent is to have each customer class conform to the highest possible standard rather than having the settlement process conform to the lowest common denominator. With respect to binding estimates, customers whose meters are read on a less frequent basis, could be converted to a binding estimate system based on a shorter time period, i.e., using a 2-month consumption estimate. The binding estimates would utilize an estimation routine that was acceptable to all parties and it would be reconciled when the actual estimates are taken. A binding estimate methodology could also be used for customer switching purposes. While these alternatives would increase costs for a small percentage of the market, they would reduce overall financial exposure in the market, which would benefit all market participants.

Recommendation on Settlement Timing / Meter Reading Cycle

Navigant Consulting recommends that Alberta Energy evaluate the "business case" currently under development by CGEY. If the benefits are determined to be greater than the costs, Navigant Consulting recommends that a working group be struck to develop an implementation plan.

One Settlement Agent

Navigant Consulting examined the current and recommended changes to the Settlement Process that will affect the business and communication interfaces between the various market participants including Retailers, consumers, WSPs, LSAs and the Power Pool of Alberta. In effect, the interfaces between the various participants reflect unique situations that may exist with each WSP and LSA. The diversity of arrangements results from a lack of standards and uniform business practices, in turn caused by the permissive nature of regulations. Despite the uniqueness of the interfaces, the legislative and regulatory requirement for a settlement process is common to all participants.

As a possible solution to resolving many of the issues currently impacting the Settlement Process, several market participants have advocated replacing the four LSAs with one settlement agent. It has been further suggested by some of the participants that the Settlement Agent should be the Power Pool of Alberta. One Settlement Agent would eliminate many of the issues identified in the RIS Report and by CGEY. However, this would negate the considerable effort that has already been made by market participants over the past 6 months and would likely result in stranded costs to the LSAs who have invested in the development of information and financial systems.

The key issue concerning the Settlement Process is, however, uniformity not centralization. In other jurisdictions such as Texas, there are a number of Qualified Settlement Entities (QSEs) that provide uniform settlement services. These QSEs compete for the business of the retailers and most retailers have gone with a single QSE to service all of their customers across the state. Applying this scenario to Alberta, it may be possible that LSA settlement functions could be made competitive under a standardized system wherein LSAs would be permitted to compete for Retailer business in the service territories of other WSPs/LSAs.

An issue related to the Settlement Agent(s) is that of responsibility for the Settlement System Code. Industry participants interviewed suggested several alternatives such as continuing with Alberta Energy, the Power Pool of Alberta, an independent accounting firm, industry committees. In terms of the entity that should be responsible, issues of transparency and conflict of interest need to be carefully evaluated.

Recommendation on Settlement Agency Arrangements

Uniform settlement rules is the key, not necessarily centralization of the settlement process

Navigant Consulting recommends that the efforts being made by CGEY and the Alberta Settlement Committee to standardize and streamline the Settlement System should be supported. Navigant Consulting believes that significant progress has been made to date. Once CGEY's recommendations have been implemented and given an opportunity to function, there should be an audit or test of all settlement systems. An appropriate test would be one conducted by an independent auditor where settlement systems are assessed in terms of conformity with established criteria and that different settlement systems would produce the same output using a consistent set of input variables. Eliminating problems with the present system will enable the Settlement Process to develop over time in a meaningful way. In addition, this will allow WSPs and LSAs to establish viable business operations. This more in keeping the concept and spirit of restructuring in Alberta.

Once an efficient settlement process is developed, future options might be to create competitive business opportunities in areas such as load settlement, outsourcing, and joint ventures. Improving the existing process is a more enabling approach whereas establishing one settlement agent is a more prescriptive approach which may result in less opportunities in the future for market participants. Ultimately, a competitive market for load settlement could cause the market to evolve naturally to one settlement agent through industry consolidation.

If the efforts of CGEY prove unsuccessful or do not appear to be providing the required benefits, other alternatives should be considered such as moving to the Texas QSE system or transferring responsibility for settlement to a single, independent agent.

Navigant Consulting's recommendation to achieve uniformity among the LSAs is an integral part of the overall recommendations made in this report, the RIS Report and implementation of CGEY's recommendations concerning standardization of information inputs and outputs, modifications to the System Settlement Code, the development and implementation uniform business practices and the role of the MSA pertaining to dispute resolution, enforcement and penalties for non-compliance.

In the event that other related recommendations are not accepted, or if efforts to resolve Settlement issues may not be successful, Navigant Consulting recommends that the Alberta Government initiate a process to transfer responsibility for Settlement to a single, independent agency. Responsibility for the System Settlement Code should remain with an independent third party, preferably Alberta Energy, at least for the foreseeable future.

Customer Information

There is a wide range of opinion among market participants concerning what information, and how accessible it should be to Retailers. There are essentially two schools of thought in this regard. Some market participants believe that access to information levels the playing field amongst players while those that favour less access believe that competitive advantages can be gained through astute market research and analysis and superior management ability. Proponents of the open information environment believe that access to detailed customer information will facilitate the transition to a completive retail market with a larger number of participants faster than a situation where access to information is restricted. However, those who favour limited access believe the market will develop with fewer players, but stronger ones.

One of the fundamental issues in market restructuring is the type and level of customer information that should be accessible by Retailers. The level of detail and type of customer related information which is available to Retailers may have a significant impact in terms of strategic planning, marketing, and overall market effectiveness. Customer information includes, among other things, information required for enrollment (i.e., Site-ID's), historical consumption information both on an individual customer basis and on an aggregated market basis, and billing determinants. Moreover, there has been some discussion among market participants about the mechanism for providing access to customer information by Retailers. Navigant Consulting is of the view that a necessary prerequisite for a competitive electricity market in Alberta is accurate and timely customer information. The necessary data includes current customer account information, and historic consumption information which may pertain to individual accounts or be aggregated to reflect classes of customers or market segments.

In terms of the responsibility of WSPs to provide customer related information, Section 31.991 (1) (b) of the Electric Utilities Act provides that:

> *After December 31, 2000, the following functions must be carried out by owners of electric distribution systems:*
>
> *(b) providing to a retailer sufficient information about the retailer's customers, including metering information about the electricity consumed by those customers, to enable the retailer to carry out billing;*

The Roles, Relationships and Responsibilities Regulation references the above noted section of the EUA however; it does not specify the customer data that should be provided to Retailers.

Key business principles relating to customer information

The Navigant Consulting Edison Report outlines key business principles relating to customer information:

(1) Information should be easily accessible by all properly authorized market stakeholders;

(2) Customer information-sharing practices that involve the release of a customer's account information should require proper authorizations determined by the Applicable Regulatory Authority or legislature;

(3) Utilities and Suppliers demonstrating good faith efforts should be indemnified against claims relating to inadvertent release of data or data errors; and

(4) The proper processing systems are in place to handle all data transactions.[a]

The Edison Report also specifies standard customer information elements for switching purposes. The information, which should be released by the WSP to a Retailer in regards to customer switching, includes customer contact information, billing determinants, and accounting information. The information requirements are outlined below for purposes of illustration:

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[a] Navigant Consulting, Inc. Report to EEI, page 11.

Customer Contact Information:

(1) Name;

(2) Service address;

(3) Billing address;

(4) Service delivery point identifier, if available;

(5) Universal identifier, if available;

(6) Utility account identifier;

(7) Electric or gas account;

(8) Metering reading date or cycle; and

(9) Wholesale delivery point.

Billing Determinants

(1) Rate class and subclass or rider, as applicable;

(2) Load profile reference category, if not based on rate class;

(3) Twelve (12) months of historic energy usage and demand information, if available. Where interval load data are available for a Customer account, twelve months of historical hourly (or other pre-determined time interval) usage data will also be provided in response to a properly authorized request via a Uniform Electronic Transaction for such data, unless the Supplier specifically requests not to receive such data. Either the most recently completed calendar year data, or the most recent twelve months of data, may be supplied, at the Utility's option. The data may be provided through a secured Web site or via other electronic means.

Account Characteristics Information

(1) Meter type, e.g., cumulative kWh register, diaphragm, rotary, orifice, and turbine;

(2) Meter constant (ie., multiplier); if applicable;

(3) Current monthly meter reading data and information;

(4) Interval data recorder indicator, i.e., "Y" or "N" except where the IDR is installed for load survey purposes, if applicable; and

(5) Automated meter reading device indicator, i.e., "Y" or "N" and time interval setting (e.g., 15 minutes), if applicable.

Other data elements may be specified locally where necessary to enable bill calculations.[a]

Should process a request for customer information within 3 business days

With respect to the handling of information requests by the utility the Navigant Consulting Edison Report suggests that a utility will normally process a request for customer information within three (3) business days of the receipt of the request. Final disposition may take up to five (5) business days.[b]

Customer Enrollment Information

Site-ID's should be recorded on customer invoices

At a minimum, Retailers require a customer's Site-ID number for customer enrollment. Moreover, Site-ID's should be recorded on customer invoices. However, some Retailers indicated a reluctance to accept copies of customer invoices due to provisions in the Electricity Marketing Regulation (AR 109/2000).

Section 13(2)(q) of the EMR provides that:

> *"A marketer must not make a copy of or keep or take away the original of a consumer's electricity bill except if it's for the purpose of providing the information referred to in the second statement in section 9(c)(i)."*

Section 9(c)(i) specifies that each marketing contract that the marketer enters into with a consumer must include the following provision:

> *"Before you sign this contract, you can request, based on up to 3 of your electricity bills in the past year, a statement of what the amount of those bills would have been if the electricity and electricity services were provided under this contract."*

Some Retailers have interpreted the above noted provisions as a prohibition against accessing or retaining customer invoices.

Historical Consumption Information

Currently, Retailers appear to be limited to three customer bills which represents approximately six -months of consumption information. This is clearly inadequate and does not allow Retailers to determine how consumption patterns might change throughout the year.

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[a] Navigant Consulting, Inc. Page 14 - 15.

[b] Navigant Consulting, Inc., EEI Report, Page 13.

In addition, there is no mechanism to obtain consumption data on an aggregated basis. The availability of aggregate data would enable Retailers to better determine how consumption patterns vary by location. Aggregated consumption information should be available from the WSP by customer class and identifiable in some manner such as three digit postal code. This would allow Retailers to identify areas of interest without jeopardizing consumer confidentiality.

Market Performance Indicators

There are currently no indicators in the Alberta electricity market to indicate how the market is performing, other than the Power Pool Price. One of the key indicators of market performance is customer switching rates. This statistic should be compiled by the WSPs to indicate switching rates by customer class and location such as by three digit postal codes. Switching statistics would be an extremely useful tool in terms of assessing overall market performance as well as providing Retailers with an indication of where marketing efforts should be concentrated.

Billing Determinants

In the current Settlement Process, WSPs provide Retailers with a consolidated invoice amount which is made up of the individual cost components. This puts Retailers in a position where they must "reverse engineer" the WSP's statement in order to provide customers with a break down of the individual costs components. This results in estimates versus actuals and is one of the factors that has lead to numerous problems associated with customer billing.

Recommendations on Customer Information

Navigant Consulting supports the position taken in the RIS Report concerning customer information:

> "For Retailers to accurately bill their customers they need data, which includes both site-specific wires and energy billing determinants. Specifically Retailers require LSAs to provide detailed hour-by-hour consumption and settlement data, either estimates or actual as applicable, for each site. For Retailers to replicate and audit the wires billing on behalf of their customers they require WSPs to provide complete billing determinants such as ratchet levels." (RIS Report, page. 23)

Navigant Consulting specifically recommends that:

- Site-ID's be shown on customer invoices;
- The Electricity Marketing Regulation should be amended by deleting Section 13(2)(q) and by changing the number of available customer bills in section 9(c)(i) from 3 to 12;

- Retailers should have access to up to 12 months of historical consumption information by customer;

- WSPs should be required to provide aggregated consumption information and switching statistics and that Alberta Energy form an industry-working group to examine how best to achieve these objectives;

The government should amend the Roles, Relationships and Responsibilities Regulation to specify the customer related data that is to be provided by WSPs to Retailers. Customer information provided by WSPs would be consistent with the information requirements specified in the Navigant Consulting Edison Report, adjusted where necessary for the unique characteristics of the Alberta electricity market.

One of the options for providing access to customer information would be through a website maintained by the WSP. The cost of developing and maintaining a website would be included in the WSPs cost of service. . Control over access to information should remain with customers at all times. Customers who are interested in a Retailer's services would provide the Site-ID number to the Retailer who would then use it to access information on the WSPs website. Retailers would be required to obtain a customer's authorization in either a "wet" or electronic format.[a] WSPs would be responsible for developing switching and aggregate consumption statistics on a quarterly basis which would be available on the WSP's website.

Retailer of Record

WSPs should provide retailers with detailed billing determinants

One of the issues raised by many of the market participants interviewed by Navigant Consulting was "Retailer of record". Concern was expressed over a lack of clarity concerning whether Retailers were required to pay Settlement related refunds to consumers who switched prior to Final Settlement. Conversely, Retailers expressed some concern regarding their ability to recover amounts owed by consumers and the consumer's obligation to pay. Generally, however, this is an asymmetric situation which tends to favour the Retailers. Ultimately, the solution to this problem should impact Retailers and consumers in a fair and equitable manner. To some extent, this is also a transitional issue that will largely be mitigated as Settlement System problems are resolved.

There are several difficulties associated with resolving this issue. For example, if a Retailer holds funds that should be paid to a customer who has switched to a new Retailer but cannot be located, the level of effort that a Retailer must exercise in order to pay out the funds is not specified. The obligation of Retailers to pay refunds to consumers in the Lethbridge area is being dealt with by the MSA.

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[a] It is Navigant Consulting's understanding that Alberta Government Services will most likely amend the current Electricity Marketing Regulation to allow for electronic signatures beginning February 2002.

Recommendation on Retailer of Record

Navigant Consulting is of the view that the Retailer who supplies power services to a customer on a certain date is the Retailer of record. The Retailer of record should continue to be responsible for making refunds after a consumer has switched to another service provider and the government should revise the Settlement Code and regulations to this effect. The service agreement between the Retailer and the customer should contain a provision that all parties will use commercially reasonable efforts to forward amounts owed.

Metering

The RIS report raised the issue of metering technology currently used by small consumers in the province. The RIS Report indicated that ...

"Customers without appropriate metering or without the appropriate price signals have little incentive to reduce consumption. A deregulated market will create a financial incentive to reduce consumption patterns that are linked to actual prices at the relevant point in time."[a]

Short-term consumer response to price signals will only occur if consumption and price are connected. This requires some form of metering technology other than cumulative hour meters which has the capability of associating the hour of electricity consumption with the applicable Power Pool price

Navigant Consulting understands that Alberta Energy has an initiative underway to examine the question of metering technology and the potential for implementing a competitive market for metering services. Moving to a different metering technology would require consideration of a number of questions such as ownership, unbundling, technology, economics, costs/benefits, classes of customers and timing. With the rapid evolution in metering technology and communication systems, perhaps to most significant question is one of timing. With improvements in metering technology and the costs of these technologies, there will undoubtedly be some point in the future when the cost/benefit ratio associated with advanced metering technologies will be better than it is today.

Recommendation on Metering

Navigant Consulting recommends that Alberta Energy evaluate the benefits/costs of converting electro-mechanical meters to meters which have an ability to differentiate consumption by time of day. This will result in a closer alignment of prevailing market prices and consumption.

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[a] RIS Report, page 30.

Electricity Market Regulation and Role of the Market Surveillance Administrator

Multiple parties regulate the present market structure in Alberta. As a result, significant regulatory gaps currently exist in the province, particularly between those areas regulated by the EUB and those areas regulated by municipalities. Under the existing market design an interesting situation that could develop is one where a Retailer is competing within a municipality against the retail affiliate of a WSP that is also regulated by the municipal owner of the WSP. The relationship between retail affiliates, WSPs and municipal governments is not transparent and could potentially result in a situation where a level playing field does not exist for municipally-controlled Retailers and independent third party Retailers. This is an arrangement that has the potential for conflicts of interest between the owner and its retail affiliate. Moreover, it is unlikely that the current market structure is a desirable one for developing a competitive market.

The regulatory process followed by the EUB and municipalities is strikingly different. Municipal owners of distribution companies generally follow a process where the distribution company develops tariff and rate proposals which are then submitted to city council for review and approval. On the other hand, the EUB follows a transparent, public process where interested parties can intervene in a tariff application and potentially influence the final decision. In addition, a well-defined regulatory structure provides a mechanism for complaints to be considered. Complaints in the municipal arena, other than those involving discrimination within a rate class, are made to city council. It is argued by some industry participants that it is impossible for a city council to regulate its distribution company and fairly consider the complaints of a third party competitor.

Transfer retail market regulatory oversight to the EUB or expand MSA's role

Navigant Consulting considered three possible options to resolve this issue. The preferred option would be to have one regulator for the Alberta electricity market. A single regulator provides a much greater opportunity to achieve a competitive retail market through its ability to enforce (reasonably) uniform rules across the entire market on a consistent basis. However, this option represents a significant departure from past and current practice in Alberta and may not be acceptable to some market participants.

The second possible option to alleviate the regulatory discrepancy would be to make the MSA responsible for addressing complaints related to retail market operation or retail market competition.[a] The MSA could either address complaints directly or, depending on the nature of the complaint, refer it to a more appropriate party (ie., the EUB or Competition Bureau) for disposition.[b] In addition, the MSA should be assigned the responsibility to deal with Settlement disputes pursuant to CGEY's recommendation. The MSA would require additional resources to meet its expanded responsibilities related to Settlement related disputes.

A significant and important issue with this second option concerns the potential for a conflict of interest between the MSA and the Power Pool of Alberta, the Balancing Pool and the Power Pool Council. This concern is recognized by the government and the government is currently conducting an industry structure review in consultation with industry.

The third option is to amend the Municipal Government Act to require that municipalities follow a standardized regulatory process that would provide interested parties with the opportunity to intervene in the tariff and rate making process. In addition, the process would provide an appeal mechanism should parties want to dispute decisions.

Recommendation on the Market Surveillance Administrator

The Alberta Government should consider the possibility of an expanded role for the MSA with respect to market surveillance, dispute resolution and enforcement and penalties related to participant activities in the Alberta electricity market. In addition, consideration should be given to the degree of independence, and in particular – transparency, required by the MSA in terms of performing additional responsibilities, required organizational structure and resource requirements.

From an industry structure perspective, this approach is likely the "path of least resistance" for developing greater uniformity in dealing with complaints and competitive issues in the Alberta electricity market.

The government should to undertake a "gap analysis" to review how market participant activities are currently regulated, where inconsistencies exist, and where there is no apparent regulation. Based on the results of this review, the government could then develop alternatives for how regulation or enforcement of certain aspects of the market should be accomplished.

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[a] This implies that the EUB and municipal governments would continue in their traditional roles related to rates, tariffs and conditions of utility service, and Government Services would continue to oversee licensed retailers serving RRO-eligible consumers.

[b] Due to the MSAs limited resources, the MSA could develop working relationships with other agencies such as the EUB or the Competition Bureau to the provide the necessary staff resources, expertise or facilities.

CREDIT AND PRUDENTIAL REQUIREMENTS

The RIS committee provided the following recommendations regarding credit issues and the prudential requirements of the Power Pool and WSPs:

RIS credit recommendations

4.1 The parties work with the Power Pool to assess the actual risk exposure for all retailers (and not just Self-Retailers) and that the credit application of each party be assessed on its individual merits and not simply on the party's bond rating. RIS understands that this recommendation is in the process of being reviewed by the Power Pool.

4.2 The Government initiate a review of the prudential requirements of WSPs as part of the recommended implementation of a standardized set of business practices for WSPs across the province as further described under Issue # III above. RIS further recommends that:

- A model be implemented for WSPs in which the credit application of each party is assessed on its individual merits and not simply on the party's bond rating.
- WSP's prudential requirements be proportional to risk. (Under this recommendation, a Retailer who agrees to settle its account fortnightly should be able to post a deposit equal to the consumption over two weeks plus the payment period and be subject to no further scrutiny, since the WSP is protected. Even this cash bond should be reduced over time as credit history becomes established and the risk of non-payment is reduced.)
- The appropriate form of prudential requirement for a Retailer (such as bond rating, letter of credit) and the level of prudential requirement, needs to be re-examined with a view to a possible reduction (to about 30 days (vs. the current 75 days), or having the first $25,000 of credit be covered as part of the wires tariff).
- Self-Retailers, with a good prior credit record with the utility, be deemed as longstanding utility customers for credit rating purposes. Under this recommendation, the WSPs should not require any prudential requirement of a Self-Retailer, above what would have been required had the Self-Retailer remained with the utility. A WSP faces no more risk from a Customer under RRO than self-retail because a Customer, whose facilities and assets are tied to a location, represents a low risk to the WSP. Credit should not be an impediment to Self-Retail.

Based on this recommendation, Navigant Consulting has assessed the current requirements and proposed changes to the prudential requirements of the Power Pool and individual wire service providers (WSPs). This review includes a comparison of the Alberta's retail and wholesale prudential requirements to those proposed for the Ontario retail and wholesale market and provides further recommendations regarding appropriate changes in prudential requirements for Alberta.

Retail Market Prudential Requirements

Alberta

Guidelines for prudential requirements have not been standardized

Wire service providers in Alberta are required to establish prudential requirements with retailers and self-retailers active in their territory. However, unlike Ontario, the guidelines for prudential requirements have not been standardized. Not unexpectedly, a review of the WSPs' prudential requirements indicated that they vary rather significantly from one WSP to another. A summary table has been created that outlines the requirements of the four major WSPs and is attached as an appendix.

ATCO Electric and EPCOR Distribution require satisfaction that a retailer applying for distribution access service have a credit rating sufficient to allay any concern that it might not be able to meet its financial obligations with respect to 75 days of distribution service and, if not, that it provide an acceptable letter of credit from a financial institution. In order to provide access on the basis of creditworthiness alone, ATCO requires an "A" Canadian Bond Rating Service (CBRS) rating, and EPCOR a BBB+ rating.

ENMAX Power and Utilicorp Networks also require assurance that the retailer is good for at least 75 days of service based on their D.A.T. charges, but their rules are a bit different. ENMAX will provide access on the basis of creditworthiness alone, but doesn't indicate how it will decide whether a retailer will have to provide a letter of credit or a cash deposit. Utilicorp requires a guarantee of a parent company with a credit rating of at least BBB, a letter of credit, a cash deposit, or some combination thereof.

Essentially, the amount of the prudential that a retailer must provide is equivalent to 75 days of wire service. The cost of service is calculated in accordance with the terms of the WSP's distribution tariff. Included in the calculation are distribution access service charges, system access service charges, deferral rider charges (if applicable), franchise fees per kWh, and GST. Indications from EPCOR are that its prudential requirement will more than double in 2002 compared with 2001. This is mostly because of new deferral charges (none were included in 2001). However, an increase in SAS charges is also a factor.

It is expected that a retailer maintain the prudential requirement, which will change as its volume of business and the WSP's perception of its credit status change, at all times. If ATCO determines that a retailer's prudential requirement has increased, the retailer has five business days to make the adjustment. EPCOR Distribution allows ten days and may require payment in advance if new prudential requirements are not met. ENMAX is silent on the amount of time that it would allow, but Utilicorp Networks indicates that it may cease to provide Distribution Access Service if the new requirement is not met in five days.

Ontario

The Ontario electricity market as currently designed, gives distributors the responsibility for facilitating the operation of the market as the wholesale supplier to all non-IMO market participants within their service areas. As part of this market facilitation role, distributors must provide access to their customer base for retailers, who also are considered non-IMO market participants. However, distributors are not intended to be at risk for uncollected commodity costs from consumers or retailers. Therefore, the Ontario Energy Board (OEB) requires that all distributors enter into a security arrangement with retailers active in their service territory.

It is important to note that large users procuring directly from the spot market, or self retailers as they are called in Alberta, are considered IMO market participants in the Ontario market. Therefore, they establish prudentials with the IMO. Any security arrangement for distribution charges remains unchanged from before, where individual distributors established their own security arrangements. Thus, it is unlikely that an Ontario "self-retailer" will be treated any differently by its distributor from a security point of view after market opening.

Current OEB Prudential Requirements for Retailers

A distributor shall accept, at the discretion of a retailer, any of the following types of security or any combination thereof:

- cash deposit;
- irrevocable letter of credit;
- surety bond[a]; or
- a lock-box arrangement[b].

A distributor may, at its discretion, accept bond ratings or other credit ratings from retailers in lieu of the other types of security described above. In applying this discretion, a distributor shall not discriminate among retailers with comparable risk profiles.

The actual amount of security that a distributor can demand is dependent upon the type of billing relationship[c] in place. The following three-step process is used in most instances:

Actual amount of security distributor can demand is dependent on type of billing relationship

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[a] A bond, typically backed by an insurance company, that guarantees payment or performance of a contract.

[b] A bank receives all customer payments and disperses funds to creditors.

[c] Three options are available: Distributor Consolidated, Retailer Consolidated, or Split Billing.

Step 1: Estimate the bill (composition depends on billing type and is explained further below) for an average consumer served by a retailer for the billing period in which the bill for delivered electricity is expected to be highest for the year. The hourly price estimates used in this calculation shall be the same price forecasts that are approved by the Board for use in calculating the average SSS price.

Step 2: Multiply the estimate of the bill for an average consumer served by a retailer determined in Step 1 by the total number of consumers served by the retailer.

Step 3: A 45 day cushion is allowed over and above the typical bill for a given customer. Therefore, if a distributor bills a retailer monthly, multiply the amount determined in step two 1 by 2.5. If a distributor bills bimonthly, multiply the amount in step two by 1.75. If a distributor bills quarterly, multiply the amount in step two by 1.5. The resulting value is the maximum amount of security that a distributor may impose on a retailer.

Unlike Alberta where the retailer will bill for all charges (retailer consolidated bill), Ontario has three different possibilities for customer billing. Therefore, the composition of the Ontario bill (for calculating prudentials) is based on the billing relationship in place between the distributor and retailer:

Three options for customer billing in Ontario

- ***Retailer-Consolidated Billing*** – Similar to the Alberta situation, under this arrangement the retailer bills the customer for all energy charges, whether competitive or non-competitive and forwards the appropriate non-competitive payments to the distributor. Therefore, since the distributor is potentially exposed to a loss on the entire customer bill, the amount of the bill used in step one should include all competitive and non-competitive costs associated with providing electricity to the customer. Currently, the OEB reference price will be used as a forecast for the competitive electricity cost for all billing relationships; however there is a proposal to change this.

- ***Distributor-Consolidated Billing*** – Under this arrangement, the distributor bills the customer for all energy charges, whether competitive or non-competitive and forwards the appropriate competitive payments to the retailer. Therefore, the distributor is exposed on the commodity portion of the bill only. There are two methods of calculating the bill amount under this billing relationship.

  If a retailer wishes to keep its price terms with consumers proprietary, the distributor shall calculate the maximum amount of security based on the competitive electricity costs only.

  If a retailer provides price information to a distributor, the bill estimate shall be based on the difference between the forecast competitive electricity costs related to the consumer and the forecast amount to be charged to the consumer based on the price information from the retailer.

Example:

Forecast Competitive Electricity Cost:	$55.00
Retailer Average Contract Price:	$50.00
Net Distributor Exposure	$ 5.00

- ***Split Billing*** – Under this arrangement, each party bills separately for it respective service, resulting in two bills for the customer. Under split billing, the distributor is exposed to the commodity portion of the bill only. Therefore, the bill estimate shall be based only on that portion of the bill covering competitive electricity costs, and not on the entire bill for delivered electricity.

Proposed Amendments to OEB Prudential Requirements for Retailers

The current provisions of the code require distributors to use the Standard Supply Service Reference Price (analogous to the RRO rate except that it is essentially a spot price pass-through) for calculating the maximum security obligation of a retailer to an LDC. This price is an annual average price projection that reflects the general state of market conditions and as such, may not be the appropriate price for determining the security required to protect against financial defaults during periods of high market clearing prices.

The OEB has proposed to amend the code to make the price used for calculating the maximum prudential obligations of retailers the same price that IMO uses to calculate wholesale market prudential support obligations[a].

To ensure that the use of a market-based reference price provides sufficient security following a high price period when invoices have not yet been paid, the proposed amendment further establishes that a distributor may retain security above that calculated above, but only to the extent that any amount retained is equal to, or less than, any payment that is known and billed to the retailer and due within the next 40 business days.

The amendments proposed by the OEB partially alleviate the concerns expressed by industry participants, primarily local distribution companies. Distributors remain concerned with the potential risk associated with a retailer ceasing operations during periods of high volatility. In this instance, it is possible that the security in place would be insufficient to offset the exposure faced by the distributor. Distributors are aggressively lobbying for the IMO to establish a deferral account that would receive any amount of uncollected commodity cost owing by a distributor to the IMO as a result of a default by a retailer. This deferral account balance, representing a shortfall in revenue for the IMO, would then be amortized over time by surcharging all customers. Therefore, the risk is spread over a large number of market participants, rather then just one distributor.

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[a] Currently, the IMO is using a range of prices between $43/MWh (OEB Reference Price) and $50/MWh to establish their prudential requirements.

Alternative arrangement proposed by the Electricity Distributors Association include:

- Shift the risk of retailer default onto the generator(s) that signed the contract, similar to the way that the natural gas industry operates;
- Allow retailers to become market participants, who would then be required to meet the IMO prudential requirements;
- Create a residual risk pool with all security received by distributors that would be administered by the IMO.

Indications are that the final arrangement for enforcing retailer prudential requirements will not be off-loaded from distributors. While most of the risk should be offset by the eventual security held by the LDC (and possibly backstopped by the IMO), it will still require distributors to be vigilant in assessing and monitoring their exposure. This will require additional expertise not currently resident in most LDCs.

Recommendations on Retail Market Prudential Requirements

It appears that the Alberta retail prudential requirements are reasonable in comparison to the Ontario requirements but there is a clear need for harmonization to avoid confusion in the marketplace. However, in the case of self-retailers that are long-term customers of a distributor before the unbundling of wires and retail services, and fully responsible for both distribution and energy charges, it is questionable why they should now be saddled with large prudential charges.

Navigant Consulting recommends the following:

- Standardize the prudential requirements across all WSPs such that investment grade credit rated companies (or guarantors) do not require additional security, using the credit rating scale identified by the Power Pool.
- If not investment grade, WSPs should accept security in the form of cash, letter of credit, surety bond or lock box arrangement.
- The amount of security (e.g. 75 days exposure) should be directly related to the billing cycle, similar to that established in Ontario.

Standardize prudential requirements across WSPs using Power Pool's credit rating scale

- Self-retailers should be allowed a discount from any security requirement based on good payment history, similar to that outlined below for Ontario IMO prudential requirements.

Allow self-retailers discount from security requirement based on good payment history

Wholesale Market Prudential Requirements

The following table outlines the major features of prudential requirements for wholesale market participants in the Alberta and Ontario markets. It is important to note that the Ontario prudential requirements are currently under review and are subject to change; however, the guidelines as of December 14, 2001 are presented below:

Table 3 – Comparison of Alberta and Ontario wholesale electricity market prudential requirements

	Alberta	*Ontario*
Maximum Net Exposure		
…Based on	60 days usage	70 days usage
Net of sales into the grid?	Yes	Yes
Includes non-competitive charges?	No	Yes
Discounts on Prudential Support Obligation		
Based on Credit Rating of:		
• AAA	• $25 million	• $50 million
• AA	• $20 million	• $25 million
• A	• $15 million	• $12.5 million
• BBB	• $10 million	• $5 million
• <BBB	• nil	• nil
Non-rated or Below BBB	No discount	A discount based on the lesser of a dollar amount or a percentage of the maximum net exposure. For distributors: • < 2 yrs $0 • 2 - 3 yrs $2 MM or 20% • 3 - 4 yrs $3 MM or 30% • 4 - 5 yrs $4 MM or 40% • > 5 yrs $5 MM or 50% For all other participants, the percentage discount is ½ of that reflected for distributors.
Other discount methods	None	70 day exposure calculation reduced to 38 days if cash prepayments of 40% of maximum net exposure are made on the 15th day and last business day of month.

	Alberta	*Ontario*
Security		
• For amounts in excess of discount	• Currently requires security, but considering an insurance program with premiums based on credit quality and exposure limit. May not be available to poor credits. Deductible of $500,000	• Must post security with IMO for balance of maximum net exposure.
• Acceptable forms of security	• Cash • Irrevocable LOC • Guarantee	• Cash • Irrevocable LOC • Guarantee (rated entity)
Unsecured Default		
• Defaults above exposure limit	• Satisfied through levy on all participants	• Not stipulated but exposure will be monitored and margin calls assessed if necessary.

As shown in **Table 3**, the current wholesale market prudential requirements in Alberta are somewhat more onerous than the proposed prudential requirements for Ontario. The major difference between the two markets relates to the treatment of market participants who do not have an investment grade credit rating. It would also seem reasonable to implement a policy similar to that used by Ontario whereby participants receive credit for a good payment history.

The benefits of an insurance approach to covering defaults by market participants are not clear at this point in time. It would be necessary to have a rough estimation of the potential premiums involved to accurately compare an insurance scheme with the Ontario approach of individual responsibility. However, it is reasonable to assume that a pooling of responsibility for payment defaults may provide somewhat less incentive for market participants to meet their Power Pool obligations during times of financial duress. Under the insurance proposal, the incremental costs associated with default are limited to a deductible payment of $500,000, the collectibility of which is questionable at best. However, if the market participant has posted security in the form of cash or a letter of credit, the party forfeits this amount if in default (Bank guarantees or Letters of Credit will usually be secured by assets of the company). Presumably, this would provide greater incentive to ensure all debts owing to the Power Pool are paid in full.

In addition, the presence of bank security in the form of a guarantee or Letter of Credit, builds in a useful redundancy into the credit review process. The credit review process that banks undertake on an annual or more frequent basis, may provide an early warning system to the Power Pool of potential credit problems if the Bank notifies the Power Pool of a change to the security.

If the Power Pool elects to use the insurance approach, it would be prudent for the Power Pool to seriously consider self-insurance rather than outsourcing to a third party. This would allow for the possibility of future reductions in premiums as the balance of premiums collected increases to a certain comfort level. With a pool of 200+ participants to spread the risk over, self-insurance would seem a viable option that would eliminate premium leakage to an outside insurance provider. If the premium pool is insufficient to cover a particular loss, then the next source of funds would be a default levy on market participants, something which market participants have already accepted.

Recommendations on Wholesale Market Prudential Requirements

The government should support the efforts of the Power Pool to review and improve the prudential requirements of wholesale market participants, including retailers and self-retailers. The Power Pool's investigation should consider security provisions for customers with a credit rating lower than BBB and potential for reduced prudential requirements for participants with an accelerated payment schedule.

CONSUMER EDUCATION

The RIS committee felt that "*Alberta consumers lack understanding in the areas of contracts and the implications of certain clauses and conditions, retail options, government actions, rebates, tariffs, bill calculation, types of metering and other detailed aspects of the market.*" To address these and other related concerns, the RIS committee made two recommendations regarding consumer education:

5.1 RIS believes that the Government has a clear responsibility to:

- *Increase certainty in the market place by transmitting a clear message of its long-term commitment to electricity deregulation.*
- *Educate consumers on its electricity deregulation policy.*
- *Increase consumer awareness about their options within their respective consumer classes.*
- *Provide background information explaining the functioning of the market.*

5.2 RIS suggests Government sponsor media communications campaign on deregulation and customer choice (with a possible link to CEA research and communications). This should only occur after policy decisions have been made on all of the key issues and once a clear and well thought out communications plan has been developed. Communication to consumers should highlight the Government's long-term-commitment to electricity deregulation and be in line with market activity so that it is targeted towards the active or soon to be actively contested sectors of the retail market.

These recommendations are supported by qualitative and quantitative market research undertaken by the government in October, 2001. This research indicated that the public generally has a low awareness and poor understanding of electricity deregulation and their choices in the marketplace. Furthermore, the research indicated that the public expects the government to provide information on deregulation separately from the information provided by utilities. It is important to note that there was considerable press given to high electricity prices early in 2001, coupled with a variety of rebates which mitigated the impact that high wholesale market prices would have on RRO consumers. In light of these factors, it is not surprising that most RRO consumers were confused about their options when the market research was undertaken. While wholesale prices have come down considerably since early 2001 and the rebates have ended, the introduction of deferral charges onto many RRO consumers' bills creates a new source of confusion.

As background for the government in addressing the RIS committee recommendations, the following section provides an overview of consumer education activities undertaken in other jurisdictions, including their specific objectives and (where possible) results measured against these objectives. The level of spending in various jurisdictions is also presented.

Following this background discussion, Navigant Consulting provides specific recommendations on consumer education activities the government (and other parties) should undertake in Alberta.

Consumer Education Campaigns in other Jurisdictions

Endorsement of the government and consumer education are critical factors in the development of competitive energy markets. When a large number of knowledgeable consumers understand how a competitive market operates and how simple it is for them to compare their options and switch suppliers, the market is much more likely to function effectively. If consumers are not aware of their alternatives and how to evaluate between these alternatives, they are much less likely to consider switching from their traditional supplier.

The state or provincial government cannot just pay lip service to competition; it must enthusiastically support electric competition. Experience in Pennsylvania and other jurisdictions suggests that creating market competition requires the participation of a government who is keen to inform consumers about the products and services available to them.

Experience in other jurisdictions supports the RIS recommendations. To be effective, a consumer education campaign must address the following: [a]

- ***Overview of New Electric Industry*** – The Pennsylvania Electric Choice Program, for example, included a multi-media consumer education campaign to reinforce the message that all Pennsylvanians are eligible to shop for a new electric generation supplier and underscore that a variety of resources are available to them to learn how to shop. The campaign, which included television and radio advertisements, aired in all media markets across the state supplemented by four-page newspaper inserts in newspapers across the state. The advertisements included the widely recognized "*Where do you think you are? Pennsylvania?*" theme. Included in this campaign was a definition of electric industry terms.

- ***Ensure Widespread Use Of Similar Terms*** – To be able to make choices among electric suppliers, consumers need reliable information about the service they are buying and the price they will pay. Focus groups of electric consumers have shown that electric consumers want all sellers to "talk the same language" when providing information about price, electricity offered to them.

- ***Choices*** – Education programs focused on residential and small business consumers are particularly important because the potential savings on utility bills are relatively small in absolute terms and do not justify time-consuming efforts to sort through and compare confusing options. Educating consumers about the new market and how to compare products will help them cost effectively capture available savings and benefits.

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[a] *http://www.state.ma.us/thepower/*

- ***Energy Sources*** – Many education campaigns provide information on the various types of energy sources, their impact on the environment and energy efficiency. This information is also supported by requirements that suppliers provide consumers with information regarding the environmental impact of their overall supply portfolio.
- ***Explanation of Unbundled Bill*** – The change from a simple bill with one or two lines to an unbundled bill can cause significant confusion among consumers. To reduce this confusion, consumer education campaigns often provide information on the new unbundled bill and its components. This information is often provided by the utilities through their communications and consumer education efforts.
- ***Consumer Rights and Protections*** – A list of applicable consumer rights and protections;
- ***Who to Call*** – Telephone listings and links to government agencies, distribution companies and competitive suppliers.

Details of specific consumer education campaigns in five jurisdictions are provided below.

Pennsylvania: www.electrichoice.com/public/index.html

Pennsylvania's Electric Competition Act (Section 2807(d)(3)) specifies "*the program shall provide consumers with information necessary to help them make appropriate choices as to their electric service. The education program shall be subject to approval by the Commission.*" The specific objectives of the campaign were as follows:

- Create an environment to minimize confusion.
- Provide information on how the electric industry restructuring may affect consumers and what is driving this transition.
- Provide consumers with clear, accurate, comparable information to assist them in making sound decisions about their electric service including an understanding of choice and how to exercise their choice.
- Establish a level of protection for vulnerable consumers by providing information about consumer rights, protections, programs and other measures available.

- Provide information and sources of assistance to consumers so they understand the basics and not fear the change.

Pennsylvania's program was a success. In the fifth of a series of surveys of electricity customers conducted in September 1999, 94 percent of Pennsylvanians reported they were aware of electric choice; 78 percent understood they can choose the company that generates their electricity but that their local electric company is still responsible for distributing electricity; 63 percent understood the process of choosing an electric supplier; 60 percent felt they could find the information necessary to make an informed choice. Each of the five surveys conducted since the start of Pennsylvania's Electric Choice Program indicated awareness levels among Pennsylvania consumers between 91 percent and 95 percent.

Ohio: www.ohioelectricchoice.com/

Ohio consumers were eligible to pick their supplier of electricity beginning January 1, 2001. In March 2000 the Public Utilities Commission of Ohio (PUCO) selected three firms to implement Ohio's Electric Restructuring Consumer Education Campaign. The Ohio consumer education campaign had three core components: 1) advertising; 2) public relations; and 3) market research.

The PUCO, in consultation with the Ohio Consumers' Counsel oversees the consumer education campaign. OEUI, the trade association for the state's investor-owned electric utilities, will administer the day-to-day implementation of the consumer education campaign and coordinate communication activities with the local educational efforts of the individual electric companies.

A six-member electric restructuring consumer education group reviewed 44 proposals from public relations, advertising and market research firms. In addition, the committee viewed formal presentations from 15 of the companies before recommending three companies to the PUCO for consideration.[a]

New Jersey:[b] www.njenergychoice.com/

New Jersey's energy choice education program was established by the New Jersey Board of Public Utilities and the Utility Education Committee (UEC). The UEC is the collaboration of incumbent New Jersey utility companies. The UEC is under the direction of the New Jersey Board of Public Utilities. The Utility Education Committee consists of: Connectiv Power Delivery, GPU Energy, New Jersey Natural Gas Company, NUI Elizabethtown Gas, PSE&G,

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[a] *http://www.puc.state.oh.us/pr/2000/PR00-0016.html*

[b] *http://www.njenergychoice.com/home.html*

Rockland Electric Company, South Jersey Gas Company, New Jersey Utilities Association.

Texas

The Public Utilities Commission of Texas (PUCT) has taken an active role in preparing Texas customers for Choice. It has established a $12 million / year education program. In addition to the PUCT education campaign, utilities have been actively informing their customers regarding choice for a couple of years. The utilities' education process is supposed to be relatively neutral and not take the form of advertising.

The PUCT hired an advertising firm to develop and implement the consumer education program in Texas. The PUCT relied on newspaper inserts, billboards, radio, and TV ads to communicate the message. The overarching goal of the education program is to increase consumer awareness regarding competition.

Before the start of retail electric competition and in conjunction with the commission's consumer education campaign, the commission issued to all consumers for whom consumer choice will be an option an explanation of the REP selection process and a REP information and selection form.

In June of 2000, the PUCT commissioned an electric consumer survey asking a range of questions about their knowledge, awareness and interest in the introduction of electric competition[a].

Victoria, Australia

Large consumers in Victoria have had a choice of electricity suppliers for many years and business consumers using between 40 MWh and 160 MWh per year were able to choose their electricity supplier on January 1, 2001. Victoria's small business and residential market (ie, consumers using less than 40 MWh per year) in Victoria was scheduled to open for competition on January 1, 2002. After consulting widely with government departments, community and consumer representatives and electricity companies, the Office of the Regulator General (ORG), the agency with regulatory oversight of the Victorian electricity market), is implementing a three-phase consumer education campaign:

1. An Early Notice brochure was sent to all customers at the beginning of October informing them of their pending ability to choose their electricity supplier. Based on information from the ORG, it appears

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[a] The results can be found at http://www.puc.state.tx.us/electric/projects/21251/21251arc/061600omp.rtf

that the brochure was sent directly to customers and was not distributed through the utility bills.

2. The main phase began in November, 2001 and comprised television, radio and print advertising (including advertisements in various ethnic press). The campaign encouraged customers to watch for a second, more comprehensive brochure outlining their pending ability to choose their electricity supplier. The campaign also encouraged customers with outstanding questions to contact a special call centre or the ORG's website for additional information.

3. Early in 2002 the third phase of the campaign will begin with further advertising and announcements providing additional information and references to available information sources.

Reflecting Victoria's multi-cultural nature, the ORG has also prepared brochures and deregulation information in seven languages other than English: Arabic, Chinese, Croatian, Greek, Italian, Turkish and Vietnamese.

Consumer Education Spending

In most jurisdictions with a competitive retail electricity market, the government and other agencies involved in deregulation spent between $0.50 to $2 per resident each year on consumer education in the period immediately prior to and following the introduction of competition. These consumer education campaigns typically ran for two years, but in some instances they ran for up to five years.

California spent $80 million on consumer education, roughly $2 per resident per year. The experience of California suggests that merely spending $2/resident to inform consumers about their new freedom to choose an electric supplier is only one part of an effective electric choice program. In California's case, insufficient shopping credits imperilled customer choice. On the other hand, New Jersey experienced relatively low switching rates in spite of having the highest average shopping credits in the U.S. The low switching rate in New Jersey may be partially due to the relatively low consumer education budget.

Table 4 – Consumer education spending in other jurisdictions

State	*Duration*	*Annual Spending (US $ million)*	*Annual Spending/ Person*
Ohio	2 years	16.0	$1.43
Pennsylvania	4 years	17.0	$1.42
Connecticut	2 years	4.5	$1.36
Michigan	4 years	12.4	$1.27
Virginia	5 years	6.0	$0.89
New Hampshire	2 years	0.9	$0.75
Maine	2 years	0.8	$0.67
Texas	not specified	12	$0.57
New Jersey	3 years	4.5	$0.56

Note: Consumer education spending for Victoria was not available

Recommendations on Consumer Education

The government of Alberta has already undertaken a number of educational activities as part of a consumer education campaign, including a number of information seminars for consumers, development of consumer brochures and establishment of a consumer web site.

Based on our understanding of the current retail electricity market situation and dynamics in Alberta, and lessons learned from other jurisdictions, Navigant Consulting developed a comprehensive list of recommendations for the government's ongoing consumer education campaign targeted to residential and small business consumers. These recommendations should be revised to reflect activities already completed or underway, and any new information from up-to-date market research. If market research indicates that specific elements or information are not necessary, the government can undertake whichever of the recommendations are appropriate..

Campaign Objectives

The objectives for Pennsylvania's consumer education campaign represent a useful starting point for Alberta (and any other nascent retail electricity market). With modifications as required to reflect Alberta's current situation and feedback through market research, Navigant Consulting recommends that the campaign should have the following objectives:

- Provide information on how the electric industry restructuring may affect consumers and the reasons behind, and expected benefits from, restructuring.

- Provide information and sources of assistance to minimize confusion and educate consumers so they understand the basics and do not fear the change.
- Generate interest in customer choice and encourage consumers to shop around.
- Provide consumers with information to assist them in making sound decisions about their electric service including an understanding of choice and how to exercise their choice.
- Coverage of all consumers, including minority and ethnic groups
- Communicate the rights, protections, programs and other measures established by Government Services and available through other legislation and regulations to protect consumers
- Encourage energy suppliers to disclose price and basic contract terms in a standard, easy-to-read format.

Campaign Elements

The most cost-effective means of achieving the campaign objectives among small business and residential customers is likely through a broad media campaign with television, radio and print advertising.

Broad media campaign likely the most cost-effective means of achieving consumer education objectives

The government should consult with other government departments and agencies, community and consumer representatives and electric utilities in the development of the campaign. While utilities can play a role in communications, it is important for the government to take the lead in consumer education because consumers see the government as an independent, unbiased third party experience. It is premature to specify the degree to which electric utilities are actively involved in the campaign, but the government may wish to have utilities distribute government-developed brochures as bill inserts to all consumers.

The media campaign should be complemented by an outreach program using brochures and videos directed to targeted audiences, an interactive web site and publicity from news releases and public appearances by senior government officials.

The government should continue conducting consumer community briefings and town hall meetings in as many Alberta communities as possible. Appearances and announcements by Alberta government officials will lend credibility to the government's other consumer education efforts.

The government should review its existing websites and those of other government agencies involved in restructuring and should take whatever steps are needed to consolidate the key information into a single, seamless source for consumers.

The campaign should also include advertising in local ethnic media and brochures in languages other than English.

Effective telephone information centres are critical to public education. The government currently has a hotline staffed with well-trained and informed operators who can respond to consumer questions and to guide consumers through the process of choosing a supplier. The government should continue to monitor the effectiveness of this hotline and make changes as required.

Navigant Consulting believes that Alberta can achieve the campaign objectives through a well-designed and planned consumer education program having an annual budget in the range of $0.50 to $1 per resident per year (subject to spending estimates provided by local communications firms with local market knowledge). The campaign should run for two years, with revisions in the message and medium as required based on feedback from consumers.

Suggested budget in the range of $0.50 to $1 per resident per year

Although the suggested budget of $0.50 to $1 per resident per year may seem high given the Alberta government's current fiscal situation, it should be considered in light of the total investment that the government and other electricity market participants have expended to get Alberta's electricity market to where it is today. Spending on consumer education could be considered as one of the final cost components in Alberta's electricity market restructuring costs. Also, it is important to recognize that if the government does not take steps to increase consumer understanding, consumers will have to rely on information from utilities and retailers (which are not viewed as impartial third parties by consumers) or will remain relatively uniformed. Greater reliance on either of these options would 1) likely result in lower switching rates and 2) impede any other government efforts to improve the competitiveness of Alberta's retail electricity market (as recommended elsewhere in this report).

Timing of Campaign

The government should delay launching the campaign until issues associated with retail settlement and business practices, and market participant concerns regarding the effectiveness and enforcement of the Code of Conduct (and possibly RRO pricing, if changes are planned) have been resolved or until the timing of their resolution is more certain. While there several other issues raised by the RIS committee and discussed elsewhere in this report that the government may also wish to address, Navigant Consulting believes that settlement and Code of Conduct issues will have the greatest impact on the number of retailers in the market and the ease with which consumers will be able to switch suppliers.

Although the settlement and Code of Conduct issues are likely to require a year or more to fully resolve, the government will likely be able to communicate how it plans to address these issues in the first half of 2002. Given this expected lag between decision-making and implementation, the government should continue to monitor market developments (customer switching rate, advertising by existing retailers, entry of new retailers) with a view to identifying when the campaign should begin.

Given the expected lead-time to develop the campaign, the government should finalize its communications plans as soon as possible to allow launch sometime during the second half of 2002 (pending resolution of other market issues as discussed above).

Ongoing Market Research and Monitoring

The government should continue its market research activities to better understand consumer awareness of restructuring and choice, but also to monitor consumer response to any retailer offerings.

After the launch of the campaign and on a quarterly or semi-annual basis thereafter, the government should undertake follow-up research to gauge the effectiveness of the campaign and identify possible changes or enhancements. The hotline discussed above would be an excellent source of feedback regarding the level of consumer understanding and any outstanding areas of confusion that need to be addressed in subsequent communications.

CODE OF CONDUCT

Regulatory bodies establish Codes of Conduct primarily to ensure that affiliates of utilities do not gain any unfair competitive advantage over other, unaffiliated retailers, to ensure that customer record confidentiality is maintained and to ensure as much as possible a "level playing field" between all retail suppliers. Codes of Conduct establish safeguards to govern the interaction between utilities and their affiliates, both during the transition to and after the introduction of competition, to avoid potential market power abuses and cross-subsidization between regulated and unregulated activities.[a]

In the absence of an effective and properly enforced code of conduct, there are four primary areas in which affiliates could gain such an advantage:

- Preferential access to customer information
- Provision of services from the WSP at less than market rates or provision of services to the wires service at higher than market rates (both of which represent a cross-subsidy from the regulated business to the unregulated business);
- Preferential access to services provided by the wires service provider;
- Advertising bias on the part of the WSP, a practice that encourages the customer to purchase from the WSP's affiliate.

This section provides a review of Alberta's code of Conduct (AR 156/2000) consistent with recommendation 6(a) of the RIS committee that;

> *6.1 The Code of Conduct Regulation be re-examined with reference to the original Power Budd Report and the MSA's annual report to Government. By undertaking such a review, the Government would allay concerns that the Code may be deficient in certain areas, may not be functioning as effectively as originally intended, may not be rigorously enforced and may not govern the relationship between the Default Retailer appointed by an Owner and the Default Retailer's unregulated affiliates. The review should examine other issues to determine whether the Code should be modified to deal with these issues."*[b]

The RIS committee recommendation points to the need to review the effectiveness of the Code of Conduct Regulation (the current Code) and develop plans to rigorously enforce the current Code. To this end, Navigant Consulting evaluated possible enhancements to the current Code aimed at improving its effectiveness (ensuring a level playing field), developed recommendations to strengthen the current code, reviewed the various enforcement mechanisms provided in the Code and identified specific enforcement actions that should be undertaken by the MSA.

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[a] See, for example, Michigan Public Service Commission Code of Conduct adopted for electric utilities in Michigan, October 29, 2001. See Appendix C.

[b] Report of the Retail Issues Subcommittee (RIS) on the Alberta Retail Electricity Markets, 18 July 2001.

Strengthening the Code of Conduct

With a view to assessing the effectiveness of the current Code and identifying areas in which it could be "strengthened", Navigant Consulting compared the current Code with the Codes of Conduct from Texas, Pennsylvania, and Ontario.

Texas Code of Conduct

Texas Code of Conduct most stringent

The Texas Code of Conduct is noteworthy for two reasons: 1) it is the most stringent and most prescriptive of the various Codes of Conduct reviewed by Navigant Consulting and 2) the retail market model being implemented in Texas allows the utilities to transfer all of their customers to the retail affiliates that provide supply under a regulated tariff (similar to the provision of RRO and Default supply by affiliated retailers in Alberta). It is also of interest because Texas government officials are reported to have met with Alberta government officials in the early stages of planning the Texas market reform to discuss the issues that the Alberta government had to deal with in establishing the Alberta retail market structure and market rules. Codes of conduct and mechanisms to create a level playing field between affiliated retailers and competitive retailers were key topics of discussion during these meetings[a].

Given the similarities in the Alberta and Texas retail market models, particular attention was paid to the Texas Code by Navigant Consulting in its evaluation of possible enhancements to the current Code. A copy of the Texas Code is provided in Appendix C.

Texas market structure, with retail affiliates providing regulated rates, is similar to Alberta's

It is interesting to note that, among the various jurisdictions surveyed by Navigant Consulting during the course of its research and analysis, Texas was the only jurisdiction in which all of the default or regulated customers were served by the retail affiliate of the utility. In most other jurisdictions, the utility served the default or regulated customers. Hence, the critical distinction in these markets with more traditional models is between the utility (which has valuable information on regulated customers) and the retail affiliate (which does not). The Codes of Conduct in these traditional markets prevent the retail affiliate from gaining preferential access to the customer information held by the utility. In Texas and Alberta, the retail affiliate (through its provision of the regulated tariff to customers who have not yet switched to a retailer) has access to customer information that is analogous to the information that the "utility" has in most other markets. Hence, the distinction between utility and retail affiliate, while still important for many elements of the code of conduct, is less meaningful when it comes to customer information in Texas and Alberta.

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[a] This could partially explain the similarities between Alberta's code of conduct and the Texas code of conduct.

This unique aspect of the Texas market (regulated rate service being provided by the utilities retail affiliate) may be one of the key factors behind the provision in Section 39.202 of the Public Utility Regulatory Act (PURA) that the retail affiliates of Texas utilities can only offer the regulated tariff within the service territory of their "parent" utility for a period of 36 months or until 40% of residential and small business load has switched to other competitive retailers. The retail affiliates cannot offer competitive services to residential and small business customers during this "prohibition" period. This clearly demonstrates that Texas regulators do not consider the retail affiliates to be "just another retailer" within their parent utility's service territory and suggests that they believe the retail affiliates have potential competitive advantages over other retailers that cannot be adequately addressed through the (quite stringent) code of conduct. If Alberta were to implement such a prohibition in Alberta, it would create a significant market opportunity for a new market entrant and could entice one or more retailers to enter to market that might otherwise not have entered the market.

Texas prohibits retail affiliates from marketing in their parent's territory for 36 months or until 40% of customers have switched

Together, the code of conduct and temporary prohibition on affiliate retailer marketing within its "parent" utility's service territory help to create a "level playing" field in Texas that is attractive to new retail market entrants. Another factor that makes Texas a relatively attractive market is its size. All told, approximately seven million residential and small business customers were given a choice of retailers on January 1, 2002. In December 2001, there were 48 licensed retailers in Texas, 8 of which were retail affiliates of the incumbent utilities.

Pennsylvania Code of Conduct

Each Pennsylvania electric distribution company is subject to a Code of Conduct adopted by the Commission, first as a result of each company's restructuring proceeding, and later in the form of a generic rule. The generic Pennsylvania Code of Conduct is provided in Appendix B. The Pennsylvania code is relatively general, but contains several clauses that are not addressed in Alberta's current Code. Five key clauses in the Pennsylvania Generic Code of Conduct that are not included in the Alberta Code of Conduct cover the areas of processing customer switching requests, advertising, dispute resolution, operational information and customer disclosure.

Ontario Energy Board Affiliate Relationships Code

The Ontario Energy Code's (OEB's) Affiliate Relationships Code (ARC) is broadly similar to Alberta's current Code, but with several critical differences. Utilities in Ontario will provide the equivalent of RRO and Default service in Ontario through what is called Standard Supply Service (SSS). With the exception of Hydro One Networks (approximately 1.2 million customers), Toronto Hydro (~700,000 customers) and Hydro Ottawa (~ 260,000 customers), most of the over 90 local distribution companies are relatively small and almost all are municipally-owned. As such, certain provisions in the ARC were designed to minimize risk for LDC.

During the recent process by which local distribution companies were legally transformed from "public utilities" into corporations owned by the local municipality, many municipalities created affiliates through which they could provide retail energy services if they choose to. Most of these affiliates remain simply corporate shells with no resources, although only a few municipalities have operationalized these companies. Of the retail affiliates that are operational, the two associated with the two largest LDCs – Ontario Hydro Energy (an affiliate of Hydro One Networks) and Toronto Hydro Energy Services Inc. (and affiliate of Toronto Hydro) – have been most active in the market.

A comparison of Alberta's current Code with the OEB's ARC is provided in Appendix D.

It is interesting to note that, similar to Texas, the OEB prohibits the simultaneous offering of regulated rate service (called Standard Supply Service, or SSS, in Ontario) and competitive retail services by any agency (including retail affiliates) within the utility's service territory[a]. Thus, if a utility outsourced the provision of SSS to a retailer, this same retailer would not be able to provide competitive retail services in the utility's service territory.

Ontario Energy Board also prohibits retail affiliates from providing regulated rates and competitive offers

Recommended Enhancements to the Current Code

The following sections discuss specific enhancements that Navigant Consulting recommends the government make to strengthen the current Code to mitigate the potential for retail affiliates of utilities to gain unfair competitive advantage over other retailers. The discussion highlights the significant differences between the current Code and these other codes and identifies the advantages of the changes.

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[a] *Standard Supply Service Code for Electricity Distributors*, Ontario Energy Board, December 8, 1999, sections 2.2.4 and 2.2.5. The Code can be found at the OEB's website: http://www.oeb.gov.on.ca/english/home.htm

The recommended enhancements cover:

- Joint marketing
- Recognition of corporate and affiliate structure
- Disclosure to customers
- Non-discriminatory access to non-regulated services
- Access to non-confidential, aggregated customer information
- Access to proprietary information, and
- Processing customer switching requests.

Each of these areas is discussed below.

Joint Marketing

Joint marketing or advertising can present a formidable obstacle for unaffiliated suppliers to overcome. On this matter the Texas Code of Conduct states:

> *(B) A utility shall not engage in joint marketing, advertising, or promotional activities of its products or services with those of a competitive affiliate in a manner that favors the affiliate. Such joint marketing, advertising, or promotional activities include, but are not limited to, the following activities:*
>
> *(i) acting or appearing to act on behalf of a competitive affiliate in any communications and contacts with any existing or potential customers;*
>
> *(ii) joint sales calls;*
>
> *(iii) joint proposals, either as requests for proposals or responses to requests for proposals;*
>
> *(iv) joint promotional communications or correspondence, except that a utility may allow a competitive affiliate access to customer bill advertising inserts according to the terms of a commission-approved tariff so long as access to such inserts is made available on the same terms and conditions to non-affiliates offering similar services as the competitive affiliate that uses bill inserts;*
>
> *(v) joint presentations at trade shows, conferences, or other marketing events within the State of Texas; and*
>
> *(vi) providing links from a utility's Internet web site to a competitive affiliate's Internet web site.*

While most of these areas are generally covered in the current Code, the last clause preventing utilities from – *providing links from a utility's Internet web site to a competitive affiliate's Internet web site* – is not. Navigant Consulting recommends that a similar clause be incorporated into the Alberta Code of Conduct.

Currently, the websites for the retail affiliates of EPCOR and ENMAX describe both their respective RRO and Default tariffs and their competitive retail offerings. Thus, it is relatively easy for a customer to go directly to the retail affiliate's site (without even viewing the WSP's website) to review their current RRO pricing and then to view the retail affiliate's competitive pricing. This simplicity and ease of customer access is not enjoyed by other competitive retailers and provides a significant competitive advantage to the retail affiliates.

This customer access to "hotlinks" to the competitive retail offerings in the website describing the RRO and Default tariffs appears to contravene clauses 18 and 19 (a) of the current Code which stipulate the following:

> *18. Where a customer requests information about retail services from an owner* ***or from any person acting on behalf of the owner for the purpose of implementing the owner's regulated rate tariff*** *(emphasis added), the owner or other person must refer the customer to the list of retailers that is available from the Department of Resource Development*
>
> *19. An owner must not: (a) provide information about retail services that encourages a customer to contact one retailer in preference to another.*

Recognition of Corporate and Affiliate Structure

Navigant Consulting believes that it is important to address the terms of the Code which could have afforded affiliated retailers an advantage over potential new entrants to the market through access to RRO and Default consumers.

RRO and Default services are currently being provided by:

- The retail affiliate of Enmax within the Enmax service territory through a contractual arrangement with Enmax, and
- The retail affiliate of EPCOR within the service territories of EPCOR and of Utilicorp Networks Canada through a contractual arrangement.

Allowing affiliated retailers to provide these services should be viewed as a transitional measure that ensured that retailers would be in place for all consumers. Now that the retail market has become better established, it is timely to review the current situation and make changes required to ensure that affiliated and non-affiliated retailers have equitable access to consumers.

The potential for advantageous provision of the retail affiliate's pricing information to customers points to the need for the government to consider a clause disallowing the WSPs and their retail affiliates from taking unfair advantage of this access to information through other affiliates or through a mechanism created through their corporate structure. Navigant Consulting. believes that, in the current market environment, this is a major impediment to new entry.

The electric utility structure explicitly addressed by the code and the transitional structure is shown in **Figure 1**.

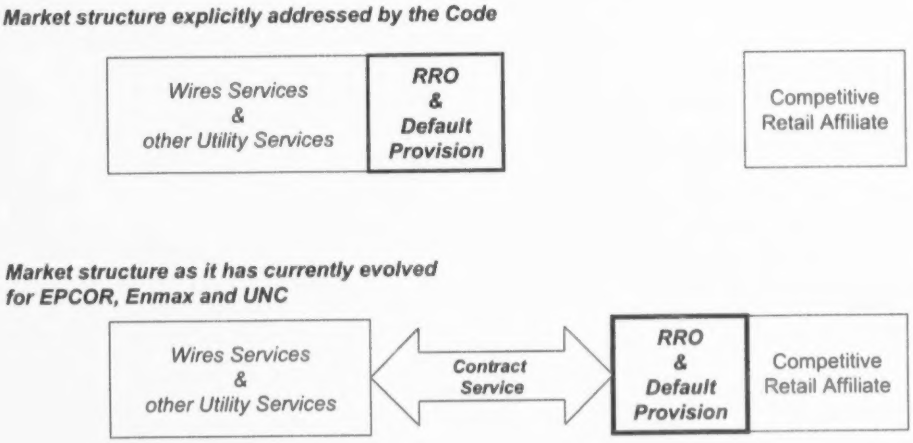

Figure 1 – Alberta electric utility structure explicitly addressed in the Code and the transitional structure

Market structure explicitly addressed by the Code

Market structure as it has currently evolved for EPCOR, Enmax and UNC

Wires Services & other Utility Services
RRO & Default Provision
Competitive Retail Affiliate
Wires Services & other Utility Services
Contract Service
RRO & Default Provision
Competitive Retail Affiliate

With some exceptions, the clauses in the current Code govern the behaviour of the utilities only. As a result of the contractual arrangements, RRO and Default services are not being provided by the utility, and thereby absolve the retail affiliates providing RRO and Default service from responsibility for adhering to some aspects of the Code. Two exceptions that provide some minor protection in these circumstances are 8.3 and 12(2)(b) of the current Code:

- Clause 8.3 of the current Code prohibiting access to the utility's computer or information systems by the retail affiliate without appropriate safeguards provides some protection, but is difficult for the utility to monitor (since the computer system providing RRO and Default services is not located within the utility) and difficult for an external party to enforce.
- Clause 12(2)(b) of the current Code allows common governance and related services provided that provision of these services do not provide a means to frustrate or circumvent the Code. However, the provisioning of RRO and Default services would not fall under corporate governance. Hence, this clause provides minimal, if any, protection.

Instead of taking the view that RRO and Default services are the exclusive responsibility of whatever entity is actually delivering them, Navigant Consulting believes that a more inclusive, more explicit Code is necessary to reflect the current market situation and address the current market needs. Navigant Consulting's view is that the utility should remain responsible for the provision of RRO and Default services regardless of how they actually source these services (ie, internally or externally). This more inclusive Code is shown schematically at the bottom of **Figure 2** as covering both the utility and the entity providing RRO and Default services.

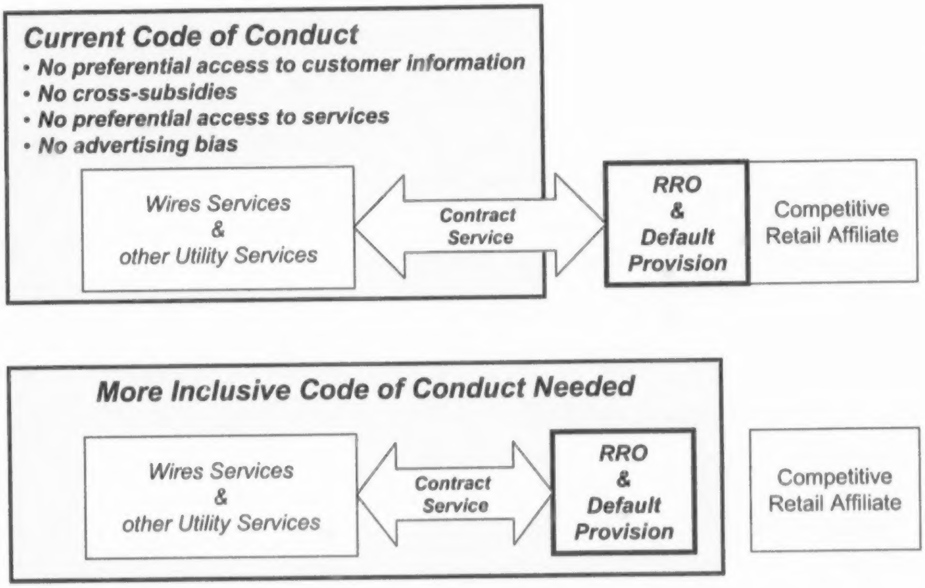
Current Code of Conduct
• No preferential access to customer information
• No cross-subsidies
• No preferential access to services
• No advertising bias
Wires Services & other Utility Services
Contract Service
RRO & Default Provision
Competitive Retail Affiliate
More Inclusive Code of Conduct Needed
Wires Services & other Utility Services
Contract Service
RRO & Default Provision
Competitive Retail Affiliate

Figure 2 – Schematic of coverage provided by current versus more inclusive code

The Texas Code contains a stipulation that utilities or retail affiliates cannot circumvent the code through contractual arrangements with another affiliate:

> ***No circumvention of the code of conduct.*** *An electric utility, transmission and distribution utility, or competitive affiliate shall not circumvent the provisions or the intent of PURA §39.157 or any rules implementing that section by using any affiliate to provide information, services, products, or subsidies between a competitive affiliate and an electric utility or a transmission and distribution utility.*

It is recommended that a clause similar to that given above be incorporated into the Alberta Code of Conduct and that the Code explicitly state that whatever entity provides RRO and Default services on behalf of the utility is subject to the same restrictions as the utility. Navigant Consulting also notes that all of the subsequent recommendations in this section should cover the utility and any entity providing RRO and Default services.

Should revise Code to ensure entity providing RRO is subject to same restrictions as utility

If the government and other stakeholders believe that a workable and enforceable clause (or clauses) to specifically address this concern cannot be developed or agreement cannot be reached as to what are the "relevant" provisions which the RRO and Default provider would be subject to, the government may wish to consider introducing a restriction prohibiting retail affiliates that are providing RRO and Default services on behalf of a utility from marketing and providing competitive services within the utility's service territory for a specific period of time or until the market is deemed to be competitive, whichever comes first. It is recognized that there would need to be at least three major retailers in the Alberta market in order for this restriction to be effective. These restrictions were established in Texas and Ontario through mechanisms outside the Code of Conduct.

Disclosure to Customers

The current Code stipulates specific behaviour of or actions for the WSP (or owner) and requires that the WSP, in turn, ensures specific behaviour of the affiliated retailer (the only stipulation for retailers in the current Code is associated with customer information). For example, the current Code requires that WSPs must not represent that customers of any retailer will receive treatment from the WSP that customers of other retailers would not receive (15 and 16) and that WSPs must not allow the use of their name, logo or other distinguishing characteristic in a manner that would imply any retailer or their customers has preferential access to the WSPs services.

A similar clause in the Pennsylvania Code of Conduct requires that when a utility's affiliated or divisional supplier markets or communicates to the public using the electric distribution company's name or logo, it shall include a disclaimer stating that:

Pennsylvania disclaimer for affiliated retailers

- *the affiliated or divisional supplier is not the same company as the electric distribution company,*
- *the prices of the affiliated or divisional supplier are not regulated by the Pennsylvania Commission and*
- *a customer is not required to buy electricity or other products from the affiliated or divisional supplier to receive the same quality service from the electric distribution company.*

The Pennsylvania Code of Conduct also states that when an affiliated or divisional supplier advertises or communicates through radio, television or other electronic medium to the public using the electric distribution company's name or logo, the affiliated or divisional supplier shall include at the conclusion of any communication a disclaimer that includes all of the disclaimers listed in this paragraph.

The Texas Code of Conduct has a similar provision, stating:

> *{Name of competitive affiliate} is not the same company as {name of utility} and is not regulated by the Public Utility Commission of Texas, and you do not have to buy {name of competitive affiliate}'s products to continue to receive quality regulated services from {name of utility}.*

The disclosure required under the Texas and Pennsylvania clauses is co[illegible] and unambiguous. Navigant Consulting recommends that similar wording be incorporated into the Alberta Code of Conduct.

Such a disclosure statement would also address the RIS committee's recommendation 7.3:

RIS recommendation on customer disclosure

> *7.3 A review and redrafting of the customer disclosure statement be undertaken to clarify the intent of the message, inform the customer and remove any confusion.*

For additional clarity, particularly to guide the behaviour of retail affiliate staff in discussions with customers, Navigant Consulting recommends that the Code should also prohibit the **retail affiliate** (ie, not just the utility) from representing that customers would receive different treatment from the WSP than if they were served by other unaffiliated retailers.

Non-Discriminatory Access to Non-Regulated Services

The current code only governs the exchange of regulated services between the WSP and other retailers (3) and access to written communications (eg, billing inserts) of the WSP (5). In fact, most Codes of Conduct ensure non-discriminatory competitive retailer access to regulated services only. Texas, however, is very clear that any preferential treatment of a WSP's affiliate would require equally favourable treatment of "similarly situated"[a] entities. This would mean that if an Alberta WSP were to give its retail affiliate an advantage in price, contract length, customer information, for example, it would have to provide similar access on the same terms to other competitive providers. The Texas Code states:

> *If a utility makes a product or service, other than corporate support services, available to a competitive affiliate, it shall make the same product or service available, contemporaneously and in the same manner, to all similarly situated entities, and it shall apply its tariffs, prices, terms, conditions, and discounts for those products and services in the same manner to all similarly situated entities. A utility shall process all requests for a product or service from*

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[a] See Texas Code of Conduct, §25.272. (C)(6) "similarly situated" refers to the standard for determining whether a non-affiliate is entitled to the same benefit a utility offers, or grants upon request, to its competitive affiliate for any product or service. For purposes of this section, all non-affiliates serving or proposing to serve the same market as a utility's competitive affiliate are similarly situated to the utility's competitive affiliate.

> *competitive affiliates or similarly situated non-affiliated entities on a non-discriminatory basis.*[a]

While the current Code may provide adequate redress if a party feels that they are being unfairly treated, the Texas provision clearly states the performance expected from the WSP in that it must refrain from treating its affiliate in a preferential manner. Navigant Consulting recommends the similar wording as the Texas provision provided above be incorporated into the Alberta Code of Conduct.

Non-Discriminatory Access to Non-Confidential, Aggregated Customer Information

The OEB's ARC and the Texas Code both allow the provision of customer information that has been aggregated in a manner that protects customer confidentiality and require that this information be made available on a non-discriminatory basis. The Texas Code also requires that:

> *...a utility shall aggregate non-proprietary customer information for a competitive affiliate only if the utility makes such aggregation service available to all non-affiliates under the same terms and conditions and at the same price as it is made available to any of its affiliates. In addition, no later than 24 hours prior to a utility's provision to its competitive affiliate of aggregate customer information, the utility shall post a conspicuous notice on its Internet site or other public electronic bulletin board for at least 30 consecutive calendar days, providing the following information: the name of the competitive affiliate to which the information will be provided, the rate charged for the information, a meaningful description of the information provided, and the procedures by which non-affiliates may obtain the same information under the same terms and conditions.*

Navigant Consulting believes that the provision of non-confidential, aggregated customer information can be valuable to the development of retailer's marketing plans (particularly in the current, early stages of retail market development in Alberta) and that this information should be provided on a non-discriminatory basis. Navigant Consulting recommends that the Alberta Code of Conduct be revised to incorporate an explicit provision allowing retailers with non-discriminatory and timely access to non-confidential customer information. Further, the provision should also require WSPs and retail affiliates to publicly disclose any such requests for the use of the retail affiliate in developing competitive offers.

Access to non-confidential information valuable to retailers in early stages of market development

Instead of (or in addition to) requiring utilities to provide non-confidential customer information on a timely basis, another means of providing retailers with access to non-confidential customer information is to provide it in an electronic database format on website. The database could then be populated

Information could be provided through a central website

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[a] Texas Code of Conduct, §25.272. (F) (1)

by all utilities using a uniform data format and updated on a periodic (eg, monthly) basis. To facilitate the database, the government could consider covering the fixed costs of developing and maintaining the database (with the utilities responsible for populating it). The government could consider appointing a third party experienced in statistical analysis and data mining (perhaps through an affiliation with an Alberta university or college) to respond to retailer queries on a cost-recovery basis.

Another option to facilitate retail access to non-confidential customer data is to require utilities to place information on a website that is accessible only by licensed retailers.

Access to Proprietary Information

Proprietary information can be just as valuable to affiliated retailer as customer information

The current Code allows sharing of governance and corporate oversight, as do many other codes of conduct, including the Texas Code. However, the Texas Code of Conduct clearly allows the sharing of corporate officers and directors only if a utility establishes safeguards to prevent affiliate access to confidential information. It is important to note that as defined in the Texas code, confidential information includes any information of a proprietary nature (not just customer information) that could be advantageous to the retail affiliate. It is also important to note that the utilities require commission approval of the adequacy of their safeguards to prevent access of the retail affiliate to confidential information.

The Texas Code states:

> *A utility and a competitive affiliate may share common officers and directors, property, equipment, computer systems, information systems, and corporate support services, if the utility implements safeguards that the commission determines are adequate to preclude employees of a competitive affiliate from gaining access to information in a manner that would allow or provide a means to transfer confidential information from a utility to an affiliate, create an opportunity for preferential treatment or unfair competitive advantage, lead to customer confusion, or create significant opportunities for cross-subsidization of affiliates.*

The Texas Code also contains a clause prohibiting employees transferred from the utility to the affiliate from using any proprietary information gained during employment with the utility to the detriment of other retailers:

> *A utility shall not assign, for less than one year, utility employees engaged in transmission or distribution system operations to a competitive affiliate unless the employee does not have knowledge of confidential information. Utility employees engaged in transmission or distribution system operations, including persons employed by a service company affiliated with the utility who are engaged in transmission system operations on a day-to-day basis or have knowledge of transmission or distribution system operations and are transferred to a competitive affiliate, shall not remove or otherwise provide or use confidential property or information gained from the utility or affiliated*

> *service company in a discriminatory or exclusive fashion, to the benefit of the competitive affiliate or to the detriment of non-affiliated electric suppliers.*

To ensure awareness of and compliance with these and other related clauses, the Texas Code requires transferring employees to sign a statement indicating that they are aware of and understand the restrictions and penalties in the Code.

Navigant Consulting recommends that the government change the Code to prevent retail affiliates from gaining access to proprietary information through shared corporate governance, common services, transfer of employees and other mechanisms. As discussed above, this restriction should apply to any entity providing RRO and Default services under contract to the utility.

Processing Customer Switching Requests

All retailers should be treated equally in processing switching requests

Navigant Consulting was informed by some stakeholders that certain affiliated retailers had developed IT systems that were more closely integrated with their affiliated WSPs IT systems, which could provide for more rapid and accurate switching of customers. If these reports are true, the affiliated retailers would have a competitive advantage over other retailers.

Given this possibility, Navigant Consulting recommends that the Alberta Code of Conduct should be revised to include a similar clause as contained in the Pennsylvania Code given below:

> *(1). An electric distribution company may not give an electric generation supplier, including without limitation, its affiliate or division, any preference or advantage over any other electric generation supplier in processing a request by a distribution company customer for retail generation supply service.*

Possible Enhancements to the Current Code

Possible enhancements for consideration by government not as critical as previous recommendations

The following sections present possible enhancements to the current Code that are, in Navigant Consulting's opinion, not as critical to the development of Alberta's competitive retail market as the preceding recommendations or for which there was insufficient information available to determine the degree to which they could impact the market. As such, these enhancements are discussed below (without accompanying recommendations) for completeness and for the government's consideration in their efforts to strengthen the Code of Conduct. As in the previous section, the following discussion highlights differences between the current Code and other codes and identifies the possible advantages of the changes.

The possible enhancements cover:

- financial transactions with affiliates
- customer information under shared services

- response to inappropriate marketing activity
- false/deceptive advertising
- processing customer switching requests
- compliance plan requirements, updates and monitoring
- complaint resolution

Each of these possible enhancements are discussed below.

Financial Transactions with Affiliates

The current Code does not contain any clauses related to the provision of loans or other financial support. Loans or other financial support can be a vehicle for cross-subsidies between the utility and its affiliates. To prevent financial transactions from creating an unfair competitive advantage, the OEB's ARC states:

> *2.3.4 - A utility shall sell assets to an affiliate at a price no less than net book value.*
>
> *2.4.2 - Terms for any loans, guarantees or other financial transactions with an affiliate can be no more favourable than the affiliate would be able to achieve on its own.*

Together, the two clauses would provide additional protection over the current Code against cross-subsidies from utilities to their affiliates. The need for incorporating a similar clause would depend on the degree to which utilities are financing their retail affiliates. This information may already be available to the government and, if not, should be available through the independent audit specified in the current Code.

Customer Information Under Shared Resources

All codes include some provision for the protection of customer information. However, the OEB's ARC also contains a clause governing protection of customer information in circumstances where the utility shares information with an affiliate. This is similar to the current situation in Alberta, with the retail affiliates providing regulated RRO and Default services. The OEB's ARC states that:

> *Access to a utility's information services shall include appropriate computer data management and data access protocols as well as contractual provisions regarding the breach of any access protocols. Compliance with the access protocols and the Services Agreement shall be ensured as necessary through a review which complies with the provisions of section 5900 of CICA Handbook. The OEB may provide direction regarding the terms of the section 5900 review. The results of any review shall be made available to the OEB.*

The current Code does not specify compliance with section 5900 of the CICA Handbook.

If the Code is revised to hold any entity providing RRO and Default services to the same restrictions as the utility (as recommended in the previous section), there may be a need for a clause similar to that from the OEB's ARC given above.

Response to Inappropriate Marketing Activity

The current Code and most other Codes require utilities to ensure that the retail affiliate does not undertake inappropriate marketing activities (ie, that would contravene the Code's intent). The OEB's ARC also contains a provision that:

> *If utility becomes aware of inappropriate marketing activity by an affiliate it shall:*
>
> - *immediately takes steps to notify affected customers of the violation*
> - *take necessary steps to ensure the affiliate is aware of the concern, and*
> - *inform the OEB in writing of such activity and remedial measures that were undertaken.*

This clause helps to protect affected customers and ensures the regulator is made aware of inappropriate marketing activity on a timely basis (and with a timely opportunity to review the remedial measures undertaken).

False/Deceptive Advertising:

The Pennsylvania Code states that:

> *An electric distribution company or electric generation supplier may not engage in false or deceptive advertising to customers with respect to the retail supply of electricity in Pennsylvania.*

The merits of incorporating a similar clause in the Code of Conduct are likely to be relatively limited, but it does provide broader protection against marketing and communication abuses by WSPs.

Compliance Plan Requirements, Updates and Monitoring

The current Code does not provide explicit requirements for the compliance plan to be developed by each WSP. The degree to which there is a need to specify the requirements for the compliance plan should be determined by the government following the MSA's review of each WSP's compliance plan.

The current Code only requires WSPs to update their compliance plan when the relationship between the WSP and its affiliate changes. The intent of compliance planning is to ensure that the utility and its affiliated retailer remain in compliance with the Code. Clearly, there are a variety of circumstances (eg, changes in the Code of Conduct, changes in the regulated services covered by the Code, etc.) that should require changes to the compliance plan. Based on this, the government may wish to revise the current Code to include the provision that WSPs are required to update their compliance plan upon any change that would render their existing compliance plan inaccurate.

Lastly, to the degree that the utilities' current compliance plans do not place responsibility for monitoring compliance with a single office and do not provide sufficient detail regarding the tasks to be undertaken by this office to ensure compliance, there may be merit in either revising the Code of Conduct to require these provisions or encouraging the utilities to incorporate these provisions in their compliance plans.

Complaint Resolution

Although the current Code requires WSPs to develop a dispute resolution procedure and include this procedure in its compliance plan [26 (3)], it is silent with respect to minimum procedures for the dispute resolution process. Of the various Codes reviewed, the Pennsylvania Code provides the greatest specificity regarding the complaint (or dispute) resolution process that utilities must follow.

> *(4). Each electric distribution company shall adopt the following dispute resolution procedures to address alleged violations of this section:*
>
> - *Regarding any dispute between an electric distribution company or a related supplier, or both, and an electric generation supplier (each individually referred to as a "party" and collectively referred to as "parties"), alleging a violation of any of the provisions of this section, the electric generation supplier shall provide the electric distribution company or related supplier, or both, as applicable, a written notice of dispute which includes the names of the parties and customers, if any involved and a brief description of the matters in dispute.*
> - *Within 5 days of receipt of the notice by the electric distribution company or related supplier, or both, a designated senior representative of each of the parties shall attempt to resolve the dispute on an informal basis.*
> - *If the designated representatives are unable to resolve the dispute by mutual agreement within 30 days of the referral, the dispute shall be referred for mediation through the Pennsylvania Commission's Office of Administrative Law Judge. A party may request mediation prior to that time if it appears that informal resolution is not productive.*
> - *If mediation is not successful, the matter shall be converted to a formal proceeding before a Pennsylvania Commission administrative law judge, and the prosecuting parties shall be directed to file a formal pleading in the nature of a complaint, petition or other appropriate pleading with the Pennsylvania Commission within 30 days or the matter will be dismissed for lack of prosecution. Any party may file a complaint, petition or other appropriate pleading concerning the dispute.*

Including a similarly prescriptive dispute resolution process in the Code would eliminate ambiguity and provide additional protection for retailers.

Enforcement

Specific concerns raised by stakeholders during our discussions suggest that 1) some market participants may not be complying with the current Code, and 2) there is a need for the current Code to be rigorously enforced. Several of the stakeholders reporting non-compliant behaviour appeared to be reluctant to "go public" with their complaint for fear of ill treatment by the utility in question.

Participants appear reluctant to "go public" with their complaints

The non-compliant behaviour reported by stakeholders includes the following:

- Specific knowledge by competitive affiliates of Default customers who had not already switched to Self-Retailer status or to other retailers (this information would be a significant advantage when [illegible]geting remote customers through the mail).
- Advance notice of customers who are intending to switch, but are currently in the 10 day "cooling off" period. Such advance notice would be an advantage in that the retail affiliate would be able to respond with a competing offer to entice the customer not to enrol with the original retailer.

Non-compliant behaviour reported to Navigant Consulting by some market participants

If these unsubstantiated reports are true, one or more parties (ie, the utility, their retail affiliate or both) may be in contravention of Clause 21(1) of the current Code that prohibits utilities and retailers from disclosing customer information without the customer's consent or Clause 23 which prohibits an utility from disclosing information relating to any other existing or potential retailer to another retailer without consent.

Navigant Consulting reviewed the current Code to identify the enforcement provisions and mechanisms available to the government and the various agencies. Based on this review, Navigant Consulting then: 1) developed possible approaches that the government and the various agencies could take to "rigorously enforce" the current Code, and 2) assessed the potential need for and benefits of revising the available enforcement mechanisms or adding other mechanisms.

Enforcement within the Current Code

In summary, the current Code provides several enforcement mechanisms:

- Utilities must complete an independent audit of their compliance with specific clauses of the current Code within 15 months of offering retail

Several effective enforcement mechanisms in the current Code

services (ie, the utilities' first audit must be completed by the end of March 2002)

- The MSA can appoint the independent auditor if the auditor selected by the utility is deemed inappropriate by the MSA
- MSA or the applicable supervising authority can request access to the utility's complaint log at any time
- Utilities must file an annual complaint report to the MSA and the applicable supervising authority no later than 30 days after the end of each calendar year (ie, utilities should have filed their first complaint report by January 30, 2002)
- Complainants can request the participation of the MSA in any voluntary complaint resolution process
- Complaints can be filed directly with the MSA or the applicable supervising authority

Collectively, these mechanisms provide the government and its agencies with substantial latitude and flexibility in enforcing the Code.

Navigant Consulting recommends the following steps be taken to address stakeholder concerns regarding enforcement:

Enforcement recommendations:

1. ***Review potential for MSA to take an active role in enforcement***
2. ***Inform market participants of existing complaint provisions***
3. ***MSA should define its expectations regarding the utility's compliance audit***

1. The government should assess the degree to which the MSA has the authority and sufficient resources to enforce the code as described above. As required, the government may change the MSA's mandate and/or the Power Pool Council may assign additional resources to facilitate its enforcement role.

2. The MSA should immediately request the complaint logs of all utilities and review them to assess any common complaints, the timeliness of utility response and the remedial actions taken (or to be taken). Although the utilities were required to file their annual report of complaints by the end of January, Navigant Consulting feels it would be valuable for the MSA to have access to the complaints logs. Assuming that the complaint logs have been kept current by the utilities, the provision of the logs should require minimal effort on the part of the utilities.

3. To encourage market participants with concerns regarding compliance issues to come forward with their complaints, the MSA should ensure that all market participants and stakeholders are aware of the provision in the current Code for complaints to be filed directly with the MSA or the applicable supervising authority and for the MSA to investigate all complaints. This will ensure that stakeholders (who may not be intimately familiar with the current Code) are aware there is

alternative mechanism to provide complaints other than complaining directly to the utility. The notice should also encourage stakeholders to provide as much evidence to support their complaint as possible to facilitate investigation. Although the current Code is silent with respect to the anonymity of complainants filing complaints directly to the MSA or the applicable supervising authority, the MSA and the applicable supervising authority should also consider treating the identity of the complainant confidential. Keeping the identity of the complainant confidential may encourage some stakeholders, who might otherwise not have, to come forward with complaints.

4. Based on its evaluation of the complaint logs provided by utilities and any complaints filed directly to the MSA, the MSA should define and communicate its expectations regarding the scope and approach to be used by the independent auditors in their audits of individual utility's compliance with clauses 8 (computer data management and access protocols, 11 (accounting records), 13 (joint research and development), 14 (transfer pricing), 31 (employee movement between the utility and retail affiliate, and complaint logging and resolution) as specified in the current Code. If the MSA believes there are other clauses of the Code that should be covered in the independent audit (such as 12 [corporate governance] and 21 [disclosure of customer information without consent], it could issue informal instructions to the utilities expressing its views and desires regarding the scope of the audit. If necessary, the MSA may also seek changes to the Code to formalize the scope of the independent audit.

5. The MSA should evaluate the independent auditors selected by the utilities and (if possible) the mandate provided by the utilities to the independent auditor in light of its expectations discussed above. If the MSA believes the auditor selected by the utility or the audit mandate is inappropriate, the MSA should consider appointing the independent auditor.

Enhancements to Available Enforcement Mechanisms

Navigant Consulting believes that the current Code provides reasonable enforcement mechanisms and that it would be premature to recommend specific enhancements before completing the steps outlined above and without knowing what additional provisions will be added to the Code. Put another way, Navigant Consulting believes that the government, MSA and other agencies should utilize the mechanisms in the current Code to their fullest extent before introducing additional enforcement mechanisms.

EXPECTED IMPACT OF PROPOSED CHANGES

Modelled attractiveness of Alberta market to a new retail market entrant under current market conditions and with proposed changes

To determine the potential impact that the various changes recommended by the RIS committee and additional recommendations/refinements presented in this report would have on the competitiveness of the Alberta retail electricity market, Navigant Consulting modelled the establishment and operation of a retail electricity business serving the Alberta market from the perspective of a new entrant.

One of the primary decision criteria used by competitive retailers in determining whether to enter a market is the present value of the new retail business taking into account the required investments into the business and the forecast future cash flows from the business, adjusted for the expected risk of the business (the risk is captured by discounting future cash flows).

The financial model used in the analysis is essentially a discounted cash flow model that has been used by Navigant Consulting to evaluate market entry strategies for competitive retailers in other US and Canadian retail electricity markets.

Focused on RRO market, since Default market is becoming increasingly competitive

Based on recent experience and competitive developments in the Alberta market, Navigant Consulting believes that the Default market (ie, customers using more 250 MWh annually) is becoming increasingly competitive through the establishment of a growing number of "self-retailer" service providers and a relatively large group of wholesale market players willing to sell to Default customers. Given this, our analytic focus was on estimating the relative attractiveness of the RRO market to a new market entrant. Hence, the model does not reflect the potential costs and benefits that a new market entrant would realize by serving Default customers. Given the relatively low margins typically achieved by retailers serving these larger customers, the exclusion of Default customers from the model would be expected to yield results that are slightly conservative.

Model Overview

The model starts with the overall RRO customer base, broken into small business and residential customer segments, and assumptions regarding the number of customers who will switch from RRO to competitive retailers over time. Those customers who switch are then allocated among the active marketers, with a specific percentage market share (among switchers) assigned to the potential market entrant. This is shown schematically in **Figure 3**.

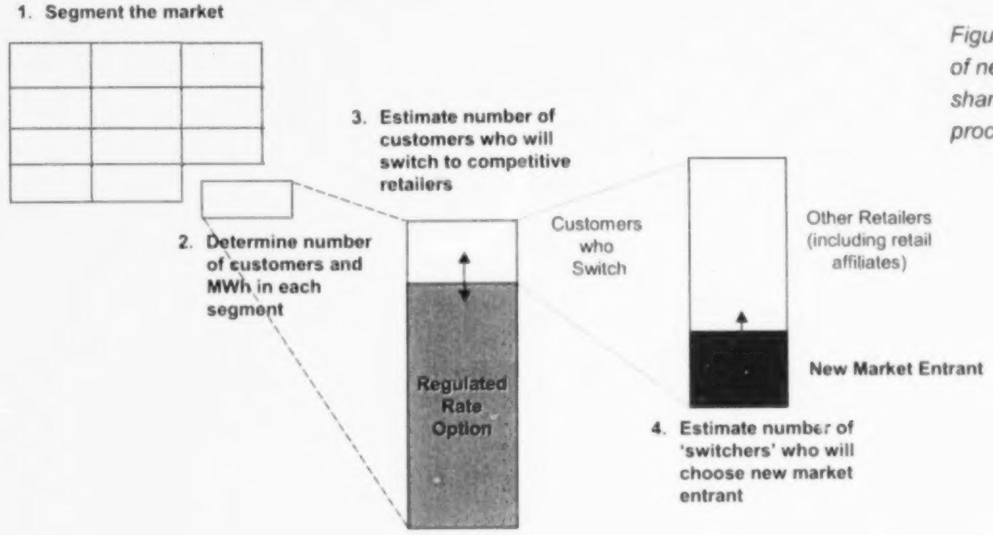
1. Segment the market
2. Determine number of customers and MWh in each segment
3. Estimate number of customers who will switch to competitive retailers
Customers who Switch
Regulated Rate Option
Other Retailers (including retail affiliates)
New Market Entrant
4. Estimate number of 'switchers' who will choose new market entrant

Figure 3 – Schematic of new entrant market share modelling process

Alberta-specific Model Parameters

Navigant Consulting's market entry model was modified to reflect the Alberta market based on the following approximations and assumptions[a]:

- Customer base:
  - 1,000,000 residential customers, growing by 1.5% annually
  - 150,000 small business customers on RRO (ie, with annual consumption < 250 MWh), growing by 1.5% annually
- Average customer consumption
  - 7.2 MWh per year for residential customers
  - 20 MWh per year for small business customers
- $48 / MWh average commodity cost for residential and small business customers
- Average gross retail contribution margin on commodity from which customer acquisition costs, customer service costs are other expenses are covered, with any remaining margin going to profits
  - Residential 15%
  - Small business 10%

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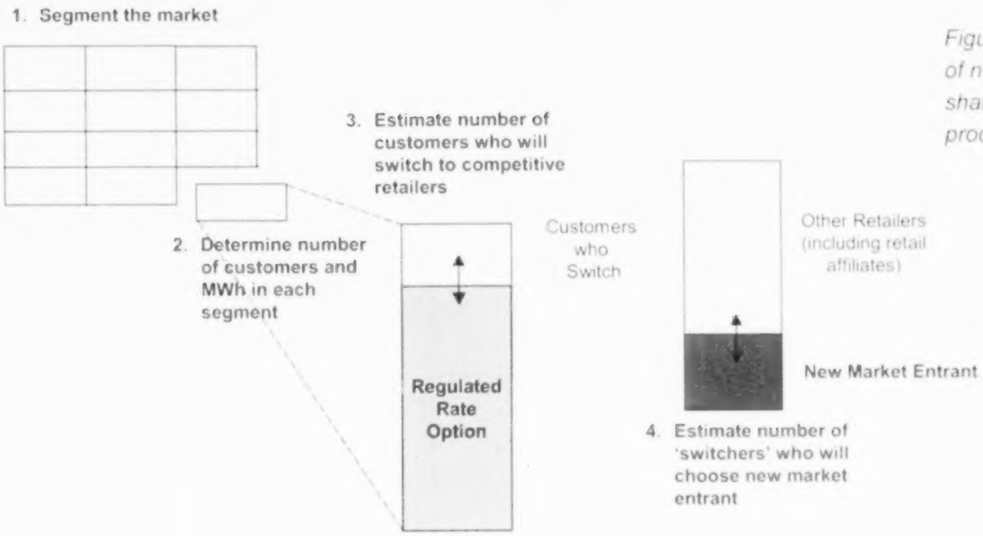
[a] More accurate inputs would change the model results for individual scenarios but, given the model structure and sensitivities, the relative impact of the proposed changes would not be expected to change.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Customers who Switch
Regulated Rate Option
Other Retailers (including retail affiliates)
New Market Entrant
4. Estimate number of 'switchers' who will choose new market entrant

Figure 3 – Schematic of new entrant market share modelling process

Alberta-specific Model Parameters

Navigant Consulting's market entry model was modified to reflect the Alberta market based on the following approximations and assumptions[9]:

- Customer base:
  - 1,000,000 residential customers, growing by 1.5% annually
  - 150,000 small business customers on RRO (ie, with annual consumption < 250 MWh), growing by 1.5% annually
- Average customer consumption
  - 7.2 MWh per year for residential customers
  - 20 MWh per year for small business customers
- $48 / MWh average commodity cost for residential and small business customers
- Average gross retail contribution margin on commodity from which customer acquisition costs, customer service costs are other expenses are covered, with any remaining margin going to profits
  - Residential 15%
  - Small business 10%

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[9] More accurate inputs would change the model results for individual scenarios but, given the model structure and sensitivities, the relative impact of the proposed changes would not be expected to change.

- $2 million business set-up costs (exclusive of IT system costs and advertising/marketing costs)
- $15 / customer / year incremental margin from sale of non-commodity products and services (eg, home security, internet, long distance telephone, water filters, appliance servicing, etc.)
- 40% average tax rate

Status Quo Model Parameters and Results

In addition to the above parameters, which were held constant for all scenarios evaluated, the model incorporated eight additional parameters that varied between scenarios. The initial values of these eight parameters were set at a level reflective of the current situation or status quo (ie, without any of the changes recommended by the RIS group and in this report).

The initial parameter values used to represent the status quo situation are as follows:

- $2 million IT and settlement system development costs
- $3 million brand building and marketing / advertising costs
- $250,000 annual IT and settlement system upgrade costs
- $40 annual customer care costs (including billing and collection, phone queries, etc.)
- 10% market share for the new market entrant among those customers who switch
- 5% of customers switch from RRO each year (starting in 2002). For example, 5% are forecast to switch in 2002, 10% in 2003, 15% in 2004 until the end of RRO for the customer class (2004 for small business and 2006 for residential) when all customer are deemed to "switch"
- $70 per customer enrolment costs (including direct marketing costs, enrolment with WSP/LSA and internal account set-up)
- 18% discount rate (to reflect new entrant uncertainty regarding the stability of current market rules and expectations regarding ongoing changes to the market rules by the government)

Not surprisingly, given the views of retailers expressed in the RIS report and conveyed to Navigant Consulting during discussions, the present value of a retail business to a new market entrant in the Alberta retail market is estimated to be negative $3 million. This result suggests that (based on the assumptions given above) entering the Alberta retail electricity market under the current market conditions would not be worthwhile.

Modelling Scenarios

To assess the impact of the various recommendations provided in the RIS report, Navigant Consulting developed the following seven independent scenarios (with scenario 1 being status quo):

2. ***Improved Settlement Systems and Business Practices*** – This scenario reflects the expected impact that improvements in the accuracy, timeliness and uniformity of settlement systems and processes would have on the present value of market entry. The key changes from the status quo in this scenario are associated with IT and settlement system costs, customer acquisition (and enrolment) costs and ongoing customer service costs.

3. ***More Effective Code of Conduct*** – Reflecting the impact of more rigorous enforcement of and changes to the Code of Conduct to provide a "level playing field" between retail affiliates and other retailers. The key changes from the status quo in this scenario are associated with "brand building and marketing/advertising costs and market share among customers who switch.

4. ***Changes to the RRO Policy*** – Reflecting changes to eliminate exit fees and to make RRO pricing (1) more uniform among the different RRO provider, and (2) similar in structure to the planned regulated gas commodity rate structure (eg, based on a monthly hedge price). The key changes from the status quo in this scenario are associated with the percentage of customers switching from RRO.

5. ***More Certainty regarding Market Rules*** – A commitment by the government to stability in the market rules would generate greater retailer confidence that their marketing and operational plans and forecast would not be jeopardized through rule changes. The only change from the status quo in this scenario is the rate used to discount future cash flows.

6. ***Effective Government Consumer Education Campaign*** – An effective campaign would reduce customer confusion and customer's perceived transaction costs. The key changes from the status quo in this scenario are the new market entrant's marketing costs, customer enrolment costs and the percentage of customers switching from RRO.

7. ***Consistent Electric and Gas Market Rules*** – Making it easier for retailers to provide dual-fuel (electric and gas) retail service to customers through changes to the retail electricity and gas market rules to make the markets more homogeneous which would provide retailers with valuable economies of scope and scale. There are numerous changes from the status quo in this scenario

Results

The results of the modelling are shown below, along with the specific values of the model parameters that varied between scenarios (highlighted).

Table 5 – New market entrant modelling inputs and results

Scenario #	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*10*
Model Parameter	***Status Quo***	***Settlement Improvements***	***More Effective Code of Conduct***	***Changes to RRO***	***More Certainty regarding Market Rules***	***Effective Customer Education Campaign***	***Consistent Electric and Gas Retail Market Rules***	***Combination of 2 through 7***
Scenario #	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*10*
Customer service costs ($ / year)	$40	$30	$40	$40	$40	$40	$30	$25
IT and Settlements System Development Costs ($ 000's)	$2,000	$800	$2,000	$2,000	$2,000	$2,000	$1,500	$800
Brand Building & Awareness Costs ($ 000's)	$3,000	$3,000	$2,000	$3,000	$3,000	$2,000	$2,000	$2,000
Annual IT upgrade costs ($ 000's)	$250	$100	$250	$250	$250	$250	$250	$100
Discount Rate (%)	18%	17%	17%	17%	15%	18%	18%	15%
Market share among customers who switch (%)	10%	10%	20%	10%	10%	10%	10%	20%
Customer acquisition / enrolment costs ($ / customer)	$70	$50	$60	$70	$70	$60	$50	$40
Percentage of customers switching each year (%)	5%	5%	5%	10%	5%	7%	7%	10%
Expected Present Value of Business ($ millions)	***($2)***	***$1***	***$6***	***($2)***	***($2)***	***($2)***	***$1***	***$16***

Given the uncertainty surrounding the underlying assumptions used in the model, the individual modelling results should be considered as indicative only. However, the modelling methodology provides reasonable accuracy in discriminating between scenarios. In other words, one should not have absolute faith that the present value of a retail business to a new market entrant is $1 million under scenario 2, but should be reasonably confident that (based on the stated assumptions) the present value of scenario 2 would be approximately $5 million less than scenario 3.

While all of the scenarios represent an improvement (ie, greater value than the status quo), the results indicate that:

- Market entry would not financially viable (ie, the present value of the discounted cash flows from the retail business is still negative) for three of the scenarios. These scenarios are:

  - Changes to the RRO pricing policy
  - More certainty regarding market rules, and
  - Effective customer education campaign.

  Taken individually, the changes reflected in these three scenarios would not be sufficient to attract new market entrants to Alberta's retail electricity market. Taken together, all of the changes reflected in these three scenarios would still produce a slightly negative present value for the business.

- Market entry would be marginally viable for a retailer (ie, the present value is slightly greater than zero) for two of the scenarios. These scenarios are:
  - Improving the settlement system and associated processes
  - Providing greater consistency in the market rules between the electricity and gas retail markets.

  All of the changes reflected in these two scenarios would yield a present value of $3 million for the business, which may be sufficiently attractive to encourage a retailer to enter the market.

- Market entry would only be attractive for a retailer (ie, the present value is substantially greater than zero) under a more effective code of conduct.

Taken together, the various changes reflected in scenarios 2 through 7 would make market entry attractive to a new market entrant. Based on these results, Navigant Consulting would expect one or more large retailers and possibly some smaller, start-up retailers to enter the Alberta market if the government implements the various changes reflected in scenarios 2 through 7 (and discussed in greater detail in other sections of this report).

SUMMARY OF RECOMMENDATIONS AND IMPLEMENTATION PLAN

A summary of the recommendations and implementation approach discussed in greater detail in previous sections of this report is provided below. It should be noted that the following recommendations generally expand on, and are supportive of, the recommendations provided by the RIS group.

RRO Tariffs

1. The government should revise the *Regulated Rate Option Regulation (AR 132/2001)* under the *Electric Utilities Act (EUA)* to ensure that RRO tariffs are 1) more uniform across the province, and 2) more conducive to the development of a vigorous retail electricity market. The specific aspects of RRO tariffs that should be revised are:
   - The hedging period underlying the RRO price
   - The switching or notification period required by customers, and
   - The calculation and recovery of any deferral charges.

2. The proposed one month hedging period for gas core market customers would be a reasonable starting point in establishing an appropriate hedging period for supplying RRO customers.

3. The government should strive for a uniform maximum switching period of 60 days or less and that switching within this period should be tied to each customer's meter reading cycle. For customers on longer meter reading cycles, the switching period should be based on the average forecast switching period (ie, 30 days for a 60 day maximum) with the customer's consumption based on an estimation routine that equitably balances the interest and exposure of the RRO provider, the competitive retailer and the customer.

4. Utilities should be required to purchase full requirements (ie, flexible volume) hedging contracts which will minimize (or eliminate) the need for deferral accounts and all stranded RRO costs.

Gas / Electric Market Convergence

5. RRO electricity prices should be set on the same hedging period as for natural gas. This can be effected by changing *Regulated Rate Option Regulation (AR 132/2001)*.

6. The government should develop a gas code of conduct that is as consistent as reasonably possible (given the differences in industry structure and market rules), with the revised electricity code of conduct (see *Code of Conduct* below).

7. The government should align the gas market billing policy with the current electricity market billing policy to promote retailer consolidated billing in order to facilitate the development of dual fuel offerings from energy retailers.

8. The government should consider establishing a timeframe for the elimination of protection for gas core market customer analogous to its commitment to the elimination of RRO for electricity customers. To the degree possible given the development of competition in the retail electricity and gas markets, the government should seek to synchronize the elimination of gas protection with the elimination of RRO.

9. The government should seek to harmonize the regulations and market rules governing the retail gas and electricity markets to the maximum extent possible, preferably through the establishment of common legislation and regulations covering both markets.

Wholesale Market

10. The Government should continue and complete its efforts to ensure a sound policy and stable regulatory structure for the wholesale electricity market in Alberta. In particular, Alberta Energy should continue to encourage developers to build new capacity by fast tracking the regulatory approval process promoting the development of new generating capacity in the province, and in particular, implementing policies and regulations which would support improving market liquidity.

11. The Government should identify and address remaining residual uncertainties, which could act as barriers to achieving a workably competitive wholesale market. Removing regulatory uncertainty from the wholesale market will have a positive spillover effect on the retail market by encouraging market entry and competition. The timing for implementing any changes to improve the existing market structure is excellent. Generally, it is easier to implement changes in a low price, stable market than high price, volatile market

12. Alberta Energy should support the efforts being made by the Balancing Pool to remarket the output of the PPAs that it holds and to restructure these PPAs so as to increase their overall marketability. A successful MAP2 auction in conjunction with other strategies such as increasing market diversity and access will increase the number of wholesale market

participants and achieve the critical mass necessary for more robust physical and forward markets.

13. Navigant Consulting recommends that Alberta Energy actively support the efforts of the industry to develop and implement policies and regulations to resolve issues related to market diversity and access and transmission congestion and expansion. Resolution of these issues will significantly improve market liquidity and foster the development of competitive wholesale market with significant benefits of the retail sector.

Load Settlement and Business Practices

14. The Government should amend the Electricity Marketing Regulation to include a provision requiring standardized contract terms and conditions between Retailers and WSPs. The terms and conditions should be developed by establishing a working group of industry participants. A law firm experienced in electricity industry contracts would be retained to develop a proforma agreement using the Master Service Agreement as the initial starting point for discussion.

15. Alberta Energy should evaluate the "business case" regarding changes in meter reading frequency currently under development by CGEY. If the benefits are determined to be greater than the costs, Navigant Consulting recommends that a working group be struck to develop an implementation plan.

16. Efforts being made by CGEY and the Alberta Settlement Committee to standardize and streamline the Settlement System should be supported. Once CGEY's recommendations have been implemented and operating for some time, there should be an audit or test of all settlement systems. Once an efficient settlement process is developed, future options might be to create competitive business opportunities in areas such as load settlement, outsourcing, and joint ventures. Ultimately, a competitive market for load settlement could cause the market to evolve naturally to one settlement agent through industry consolidation.

17. This recommendation to achieve uniformity among the LSAs is an integral part of the overall recommendations made in this report, the RIS Report and implementation of CGEY's recommendations concerning standardization of information inputs and outputs, modifications to the System Settlement Code, the development and implementation uniform business practices and the role of the MSA pertaining to dispute resolution, enforcement and penalties for non-compliance.

18. In the event that the current efforts to resolve Settlement issues are not successful, the Government should initiate a process to transfer responsibility for Settlement to a single independent agency.

Responsibility for the System Settlement Code should remain with an independent third party, preferably Alberta Energy, at least for the foreseeable future.

19. The government should support the position taken in the RIS Report concerning customer information, with specific changes as follows:
    - Site-ID's be shown on customer invoices;
    - The Electricity Marketing Regulation should be amended by deleting Section 13(2)(q) and by changing the number of available customer bills in section 9(c)(i) from 3 to 12;
    - Retailers should have access to up to 12 months of historical consumption information by customer;
    - WSPs should be required to provide aggregated consumption information and switching statistics and that Alberta Energy form an industry- working group to examine how best to achieve these objectives;

20. The government should amend the Roles, Relationships and Responsibilities Regulation to specify the data that is to be provided by WSPs to Retailers. Customer information provided by WSPs should be consistent with the information requirements specified in the Navigant Consulting Edison Report, adjusted where necessary for the unique characteristics of the Alberta electricity market.

21. The government should revise the Settlement Code and regulations to stipulate that the Retailer who supplies power services to a customer on a certain date is the Retailer of record and that the Retailer of record should continue to be responsible for making refunds after a consumer has switched to another service provider. The service agreement between the Retailer and the customer should contain a provision that all parties will use commercially reasonable efforts to forward amounts owed.

22. Navigant Consulting recommends that Alberta Energy evaluate the benefits/costs of converting electro-mechanical meters to meters which have an ability to differentiate consumption by time of day to better align market prices and consumption.

23. The Alberta Government should consider the possibility of an expanded role for the MSA with respect to market surveillance, dispute resolution and enforcement and penalties related to participant activities in the Alberta electricity market as part of its industry structure review. If a decision is made to expand the role of the MSA, the government should undertake a "gap analysis" to review how market participant activities are currently regulated, where inconsistencies exist, and where there is no apparent regulation. Based on the results of this review, the government could then develop alternatives for how regulation or enforcement of certain aspects of the market should be accomplished.

Credit and Prudential Requirements

24. Through an industry working group and changes to market rules as required, the government should standardize the prudential requirements across all WSPs such that investment grade credit rated companies (or guarantors) do not require additional security, using a the credit rating scale identified by the Power Pool. If not investment grade, WSPs should accept security in the form of cash, letter of credit, surety bond or lock box arrangement. The amount of security (e.g. 75 days exposure) should be directly related to the billing cycle, similar to that established in Ontario.

25. Self-retailers should be allowed a discount from any security requirement based on good payment history, similar to that provided in the Ontario IMO's prudential requirements.

26. The government should support the efforts of the Power Pool to review and improve the prudential requirements of wholesale market participants, including retailers and self-retailers. The Power Pool's investigation should consider security provisions for customers with a credit rating lower than BBB and potential for reduced prudential requirements for participants with an accelerated payment schedule.

Consumer Education

27. The government should implement a consumer education campaign with the following objectives:
    - Provide information on how restructuring may affect consumers and the reasons behind, and expected benefits from, restructuring.
    - Provide information and sources of assistance to minimize confusion and educate consumers so they understand the basics and do not fear the change.
    - Generate interest in customer choice and encourage consumers to shop around.
    - Coverage of all consumers, including minority and ethnic groups
    - Communicate the rights, protections, programs and other measures available to protect consumers
    - Encourage energy suppliers to disclose price and basic contract terms in a standard, easy-to-read format.

28. In order to achieve its objectives, the consumer education campaign would likely require a broad media campaign including television, radio and print advertising. Spending in other jurisdictions implementing similar campaigns suggests that communications spending in the range of $0.50 to $1.00 per resident per year would be a reasonable starting point for budget purposes (pending finalization of the objectives and input from local

communications firms). The media campaign should be complemented by an outreach program using brochures and videos directed to targeted audiences, an interactive web site and publicity from news releases and public appearances by senior government officials.

29. The government should delay launching the campaign until issues associated with retail settlement and business practices, and market participant concerns regarding the effectiveness and enforcement of the Code of Conduct (and possibly RRO pricing, if changes are planned) have been resolved or until the timing of their resolution is more certain.

30. Given the expected lead-time to develop the campaign, the government should begin development as soon as possible to allow launch sometime during the second half of 2002 (pending resolution of other market issues as discussed above).

31. The government should continue to monitor its capacity to respond (and the effectiveness of its responses) to customer queries and make changes as required.

32. The government should continue its market research activities to better understand consumer awareness of restructuring and choice, but also to monitor consumer response to the consumer education campaign itself as well as any retailer offerings.

Code of Conduct

33. The government should strengthen the existing code of conduct to address weaknesses in the following areas:
    - Joint marketing
    - Recognition of corporate and affiliate structure
    - Disclosure to customers
    - Non-discriminatory access to non-regulated services
    - Access to non-confidential, aggregated customer information
    - Access to proprietary information, and
    - Processing customer switching requests.

34. The government should assess the degree to which the MSA has the authority and sufficient resources to enforce the code as described above. As required, the government may need to change the MSA's mandate and/or the Power Pool Council may assign additional resources to the MSA to facilitate its enforcement role.

35. The MSA should take the following actions:
    - Request the complaint logs of all utilities and review them to assess any common complaints, the timeliness of utility response and the

remedial actions taken (or to be taken) if they have not already provided them as required in the Code of Conduct (prior to the end of January).

- Inform market participants and stakeholders of the provision in the current Code for complaints regarding code of conduct issues to be filed directly with the MSA or the applicable supervising authority and for the MSA to investigate all complaints.
- Based on its evaluation of the complaint logs provided by utilities and any complaints filed directly to the MSA, the MSA should define and communicate its expectations regarding the scope and approach to be used by the independent auditors in their audits of individual utility's compliance with clauses 8 (computer data management and access protocols, 11 (accounting records), 13 (joint research and development), 14 (transfer pricing), 31 (employee movement between the utility and retail affiliate, and complaint logging and resolution) as specified in the current Code.
- The MSA should evaluate the independent auditors selected by the utilities and (if possible) the mandate provided by the utilities to the independent auditor in light of its expectations discussed above. If the MSA believes the auditor selected by the utility or the audit mandate is inappropriate, the MSA should consider appointing the independent auditor.

Implementation Plan

The following implementation plan lists the key actions to be taken by each of the various agencies and market participants as appropriate to implement the recommendations. Some actions cover more than one recommendation and some recommendations do not have a corresponding recommendation, hence there is not a one-to-one linkage between recommendation and action.

Recomm. No.	*Agency*	*Action*	*Timing*
		RRO Tariffs	
1. RRO Tariffs	Alberta Department of Energy (ADOE)	• Identify specific changes to Regulated Rate Option Regulation (AR132/2001) required to provide greater specificity regarding RRO tariffs, specifically related to hedging period underlying the RRO price, notice period and deferral accounting. • Discuss planned changes to RRO regulation with the EUB and encourage EUB to consider these changes in upcoming RRO hearings.	As soon as possible, to allow sufficient time for EUB to reflect in its review of upcoming RRO filings.
1. RRO Tariffs	ADoE	• Revise Regulated Rate Option Regulation (AR132/2001) for greater specificity regarding RRO tariffs.	By August, 2002 to allow utilities and retailers time to develop their 2003 plans in response to the changes.
		Gas/Electric Market Convergence	
7. Gas Retail Billing	ADoE	• Alignment of gas retail market billing policy with electricity retail market billing policy encouraging retailer consolidated billing	Concurrent with other changes to gas retail market rules and policies
6. Gas Code of Conduct	ADoE	• Develop draft gas code of conduct governing affiliate behaviour in the gas market. Gas code should reflect electricity code of conduct.	After deciding upon which changes, if any, will be made to the electricity code of conduct
		Wholesale Market	
10. Regulatory framework for the wholesale market	ADoE	• Continue efforts to ensure a stable regulatory structure and, in particular, policies to encourage development of new generation and improve market liquidity.	On-going.
11. Regulatory uncertainty	ADoE	• In consultation with industry stakeholders, identify and address any remaining residual uncertainties pertaining to the wholesale market. In particular, evaluate the cost/benefit of price signals from adjacent markets on the Alberta electricity market.	By January 2003 to allow sufficient time to determine the impact and effect of the MAP2 auction and other initiatives implemented during 2002.
12. Balancing Pool and MAP2	ADoE	• Continue to support the efforts of the Balancing Pool to remarket the output of the unsold PPAs and ultimately to implement a permanent solution. Alberta Energy can provide support by promoting the benefits of participation in the marketplace.	Provide support through to conclusion of the MAP2 auction, currently expected July 2002.

Recomm. No.	***Agency***	***Action***	***Timing***
13. Market diversity and transmission congestion	ADoE	• Support industry efforts to develop policies and regulations to resolve issues related to market diversity and access, and transmission congestion and expansion. Alberta Energy should evaluate policy options related to Alberta participation in the export market and in transmission cost sharing and rate design.	Develop policies concurrent with the EUB hearing regarding transmission congestion.
		Settlement and Business Practices	
14. Electricity Marketing Regulation.	Alberta Government Services and ADoE	• Initiate process to amend the EMR to include a provision requiring standardized contract terms and conditions. • Establish an industry working group with a mandate to develop standardized contract terms and conditions between Retailers and WSPs.	Amend EMR by August 2002. Develop a proforma contract by June 2002 for industry comment. Completion of standardized contract by October 2002.
15. Meter reading cycle.	ADoE	• Evaluate CGEY's business case for revising the meter reading cycle. • In conjunction with industry representatives, ATCO and UNC to develop an implementation plan.	Complete review of CGEY business case within 3-months of submission. Develop and implement plan by year-end 2002.
16. Settlement System.	Alberta Settlement Committee	• Once LSA settlement systems have been modified pursuant to RIS and CGEY recommendations, the ASC should retain an independent auditor and conduct an audit of the load settlement systems to ensure that each system is in compliance with performance standards and will produce consistent and comparable outputs using a common set of input parameters.	Subsequent to the final implementation of CGEY recommendations. Settlement systems should be tested and approved prior to the end of 2002.
18. Transfer of responsibility for System Settlement.	ADoE	• If the current CGEY/ASC efforts to resolve settlement related issues are unsuccessful, Alberta Energy should initiate a process to transfer responsibility for system settlement from the LSAs to a single, independent agency.	As soon as possible after a decision to dispense with the current efforts to resolve outstanding settlement issues.
19. Customer information.	Alberta Government Services and ADoE.	• Initiate process to amend the EMR. • Site-Ids to be shown on customer invoices. • Establish industry-working group to determine market information objectives and requirements, data gathering process, etc. • WSPs to develop consumption data and switching statistics.	As soon as possible. As soon as possible. Establish industry-working group by May 2002. Aggregate market data and switching statistics should be available by end of third quarter, 2002.
20. Customer information and billing information.	ADoE	• Amend Roles, Relationships and Responsibilities Regulation to provide greater clarity and specificity concerning information to be provided by the WSPs to Retailers.	As soon as possible.

Recomm. No.	***Agency***	***Action***	***Timing***
21. Retailer of record.	ADoE & Alberta Settlement Committee	• Draft necessary changes to the Settlement System Code. • Provide opportunity for industry feedback. • Implement changes.	Concurrent with CGEY/ ASC efforts to resolve outstanding settlement issues.
22. Metering	ADoE	• Research cost/benefits of alternative metering technology. • Identify and evaluate options for meter ownership and a competitive market for providing metering services. • Establish industry task force to develop appropriate recommendations and implementation plan.	Concurrent with other work currently being carried out by Alberta Energy pertaining to metering. Recommendations and implementation plan should be completed by December 2002.
23. Role of the MSA	ADoE & MSA	• Develop terms of reference for the MSA's expanded role, if required. Work would include a "gap analysis" to review responsibilities and practices of the MSA, EUB, municipal governments and the Competition Bureau. • Alberta Energy amends regulations as required. • MSA to develop staff and budget proposals.	Initiate process with the objective of having a re-structured MSA fully operational as soon as possible.
Prudential Requirements			
24. WSP Prudentials	ADoE	• Establish an industry working group comprised of representatives from WSPs, retailers and self-retailers to establish uniform and more flexible prudential requirements for wires charges to retailers and self-retailers. • As appropriate, the working group should be encouraged to consider the potential applicability of any revisions to the Power Pool's prudential requirements	After the Power Pool announces changes to its prudential requirements.
Consumer Education			
27. Consumer Education Campaign	ADoE	• Identify consumer education objectives and develop a communications campaign that will achieve these objectives and reflects the current level of awareness among RRO customers	As soon as possible to allow sufficient time to develop collateral material.
31. Consumer Query Response Capabilities	ADoE and Government Services	• Continue to monitor existing capabilities re: in-bound consumer queries (ie, hotline) and overall effectiveness of the website. Consider providing a web-based survey for visitors to the ADoE website and/or follow-up surveys with callers to the ADoE hotline • Clarify the respective roles of ADoE versus Government Services in responding to queries, consider establishing a direct "hotlink" for both organizations to transfer inbound calls to the other organization	After the consumer education campaign design has been finalized and the expected role of these existing capabilities are identified.

Recomm. No.	***Agency***	***Action***	***Timing***
29. Consumer Education Campaign	ADoE	- Launch the consumer education campaign	After the government announces its decisions regarding changes in market rules and policies based on this report, the RIS report and other initiatives. The government should also consider delaying the campaign to coincide with entry of another major retail player, but should not wait beyond the end of 2002 or sooner, depending on market activity (eg, heightened activity by Enmax and EPCOR)
		Code of Conduct	
33. Revise Code of Conduct	ADoE	- Revise the Code of Conduct as appropriate, with support from internal or external legal counsel as appropriate. - Communicate the changes through a workshop with market participants.	As soon as possible to allow market participants to revise their business plans in response to the changes
35. MSA Enforcement of Code of Conduct	MSA	- Proactive use of enforcement mechanisms available within the existing Code of Conduct	As soon as possible

APPENDIX A: COMPARISON OF WIRE SERVICE PROVIDERS' RETAILER PRUDENTIAL REQUIREMENTS

ATCO Electric	***EPCOR Distribution***	***ENMAX Power Corp***	***UtiliCorp Networks Canada***
Prudential Requirements			
(a) the Retailer or other guarantor must have at all times at least an "A" rating from CBRS or equivalent, or	(a) the Retailer or guarantor must have at all times a rating of at least BBB+; or	(a) the Retailer or other guarantor must satisfy EPC's credit requirements; or	The Retailer must provide a guarantee of a parent company with a credit rating of at least BBB from CBRS or equiv.; or an irrevocable letter of credit; or an irrevocable bank guarantee; or a cash deposit in UNC's name, or a combination of these instruments acceptable to UNC, in an amount equal to a credit limit calculated as the value, forecast by UNC, of the Retailer's required payments under UNC's D.T. over a 75 day period.
(b) the Retailer must provide in a manner as set out in the Consumer Choice guide: a bank guarantee or acceptable letter of credit equal to the ATCO's estimate of the Retailer's financial obligation under the D.T. over 75 days.	(b) the Retailer must provide a bank guarantee, a letter of credit, or a cash deposit in EPCOR's name for an amount not less than the financial obligations which EPCOR Dist. estimates it will be owed for 75 days.	(b) the Retailer must provide an acceptable irrevocable letter of credit from a lending institution or a cash deposit for an amount to be determined by EPC up to the value of 75 days of EPC's service	
Maintaining Prudential Requirements			
ATCO Electric will ensure that the expected financial obligations do not exceed the credit limit or the amount of security provided, whichever is the case. If the financial obligations for at least 75 days are estimated to exceed 80% of the credit limit, the company may re-evaluate the credit limit and/or request additional security not in excess of the Retailer's obligations over a 75-day period. If additional security is requested it will be due within 5 business days. If it isn't presented, ATCO reserves the right to suspend the provision of "additional" DAS to the Retailer.	EPCOR will ensure that the expected financial obligations do not exceed the credit limit or the amount of security provided, whichever is the case. If the financial obligations for at least 60 days are estimated to exceed 80% of the credit limit, the company may re-evaluate the credit limit and/or request additional security and/or payment in advance. If additional security is requested it will be due within 10 business days. If the added security is not presented within that time frame, EPCOR Dist. reserves the right to suspend further DAS.	EPC states that it may increase or decrease the amount of security that it requires if it changes its assessment of the Retailer's ability to meet its payments or as the amount of service required by the Retailer changes. No other details are provided.	UNC indicates that whenever it determines that the value of the retailer's payments under UNC's D.T. for the next 75 days will exceed the security provided to date, the Retailer must either pay UNC the amount by which that value exceeds the security or provide additional security. If UNC determines that it is not adequately secured it may, upon 5 days notice, cease to provide DAS until the Retailer provides adequate security.
Retailers who have been granted DAS on the basis of their credit rating alone are required to report any downgrading of their credit rating within 2 business days.	Same as ATCO.	No mention	No mention

ATCO Electric	*EPCOR Distribution*	*ENMAX Power Corp*	*UtiliCorp Networks Canada*
rating within 2 business days.			
If a Retailer fails to pay any billed amount, ATCO will draw the amount owing from the Retailer's security deposit. The Retailer will then be required to replenish the security deposit as outlined above.	Same as ATCO.	No mention.	No mention.
No mention.	If a Retailer who has been granted DAS on the basis of the provision of an irrevocable letter of credit fails to provide a replacement letter at least five days prior to the expiration of that Letter, EPCOR Dist. will be entitled to draw the full amount of the letter and hold the amount as security.	No mention.	No mention.
No mention.	No mention.	If there is a decrease in the amount of security required, EPC will accept a substitution letter of credit or return the surplus cash deposit upon request.	No mention.
Additional Information re: Credit Assessment			
Retailers seeking to provide guarantee via Guarantee by an affiliate or person must provide audited financial statements for three years. ATCO shall establish the Retailer's credit limits following a credit assessment and notify the retailer of its limit. Except for the "A" bond rating, ATCO's credit requirements are unclear.	Retailer must provide EPCOR with audited financial statements for the most recent 3 years. EPCOR will then establish the Retailer's credit limits and notify the Retailer. (The ATCO and EPCOR approaches are essentially the same.)	EPC must be convinced after reviewing audited financial statements and credit rating reports of the Retailer's creditworthiness if not to insist on a letter of credit or a cash deposit. However, exactly what EPC views as sufficient to satisfy its needs in this regard is not clear. The statement of prudential requirements makes no reference to a bond rating.	None provided

ATCO Electric	***EPCOR Distribution***	***ENMAX Power Corp***	***UtiliCorp Networks Canada***
Initial Obligation for Prudential Amounts			
ATCO indicates that the initial obligation when retailer is just starting up is to be estimated on the basis of anticipated load such that the initial financial obligations will not exceed the established credit limit where the prudential is satisfied by retailer's credit rating. In other cases, the initial obligation will be based on ATCO's projected value of the retailer's payments under ATCO's D.T. over a 75 day period.	Same as ATCO.	No indication provided in the ENMAX requirement. Presumably, this would be similar to the approach taken by ATCO and EPCOR.	No indication provided in Utilicorp's requirement. Presumably, this would be similar to the approach taken by ATCO and EPCOR.
Interest on Security Deposits			
Interest on each Retailer's cash security deposit held by the company will be calculated at the rate specified in the *Residential Tenancies Act*, but not less than 2.5% per annum. Interest credited to Retailer's account annually	Same as ATCO except that the Act referred to is the *Landlord and Tenant Act*.	The ENMAX Power statement regarding its prudential requirements makes no reference to the payment of interest on cash deposits made to meet the security requirements.	The applicable section of UNC's Retail Services Agreement (Schedule A) makes no reference to the payment of interest on security deposits.

APPENDIX B: PENNSYLVANIA GENERIC CODE OF CONDUCT[a]

Electric generation suppliers and electric distribution companies shall comply with the following requirements:

1. An electric distribution company may not give an electric generation supplier, including without limitation, its affiliate or division, any preference or advantage over any other electric generation supplier in processing a request by a distribution company customer for retail generation supply service.

2. Subject to customer privacy or confidentiality constraints, an electric distribution company may not give an electric generation supplier, including without limitation its affiliate or division, any preference or advantage in the dissemination or disclosure of customer information and any dissemination or disclosure shall occur at the same time and in an equal and non-discriminatory manner. "Customer information" means all information pertaining to retail electric customer identity and current and future retail electric customer usage patterns, including appliance usage patterns, service requirements or service facilities.

3. An electric distribution company or electric generation supplier may not engage in false or deceptive advertising to customers with respect to the retail supply of electricity in Pennsylvania. Each electric distribution company shall adopt the following dispute resolution procedures to address alleged violations of this section:

    - Regarding any dispute between an electric distribution company or a related supplier, or both, and an electric generation supplier (each individually referred to as a "party" and collectively referred to as "parties"), alleging a violation of any of the provisions of this section, the electric generation supplier shall provide the electric distribution company or related supplier, or both, as applicable, a written notice of dispute which includes the names of the parties and customers, if any involved and a brief description of the matters in dispute.

    - Within 5 days of receipt of the notice by the electric distribution company or related supplier, or both, a designated senior representative of each of the parties shall attempt to resolve the dispute on an informal basis.

    - If the designated representatives are unable to resolve the dispute by mutual agreement within 30 days of the referral, the dispute shall be referred for mediation through the Pennsylvania Commission's Office of Administrative Law Judge. A party may request mediation prior to that time if it appears that informal resolution is not productive.

    - If mediation is not successful, the matter shall be converted to a formal proceeding before a Pennsylvania Commission administrative law judge, and the prosecuting parties shall be directed to file a formal pleading in the nature of a complaint, petition or other appropriate pleading with the Pennsylvania Commission within 30 days or the matter will be dismissed for lack of prosecution. Any party may file a complaint, petition or other appropriate pleading concerning the dispute.

4. An electric distribution company may not illegally tie the provision of any electric distribution service within the jurisdiction of the Pennsylvania Commission to one of the following:

    - The purchase, lease or use of any other goods or services offered by the electric distribution company or its affiliates.

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[a] Subchapter E of the Pennsylvania Public Utility Code 66 Pa.C.S. § § 501 et al., See: www.pacode.com/secure/data/052/chapter54/subchapEtoc.html.

- A direct or indirect commitment not to deal with any competing electric generation supplier.

5. An electric distribution company may not provide any preference or advantage to any electric generation supplier in the disclosure of information about operational status and availability of the distribution system.

6. An electric distribution company shall supply all regulated services and apply tariffs to non-affiliated electric generation suppliers in the same manner as it does for itself and its affiliated or division electric generation supplier, and shall uniformly supply all regulated services and apply its tariff provisions in a non-discriminatory manner.

7. Every electric distribution company and its affiliated or divisional electric generation supplier shall formally adopt and implement these provisions as company policy and shall take appropriate steps to train and instruct its employees in their content and application.

8. If an electric distribution company customer requests information about electric generation suppliers, the electric distribution company shall provide the latest list as compiled by the Pennsylvania Commission to the customer over the telephone, or in written form or by other equal and non-discriminatory means. In addition, an electric distribution company may provide the address and telephone number of an electric generation supplier if specifically requested by the customer by name. To enable electric distribution companies to fulfil this obligation, the Pennsylvania Commission will maintain a written list of licensed electric generation suppliers. The Pennsylvania Commission will regularly update this list and provide the updates to electric distribution companies as soon as reasonably practicable. The Pennsylvania Commission will compile the list in a manner that is fair to all electric generation suppliers and that is not designed to provide any particular electric generation supplier with a competitive advantage.

9. An electric distribution company or its affiliate or division may not state or imply that any delivery services provided to an affiliate or division or customer of either are inherently superior, solely on the basis of their affiliation with the electric distribution company, to those provided to any other electric generation supplier or customer or that the electric distribution company's delivery services are enhanced should supply services be procured from its affiliate or division. When an electric distribution company's affiliated or divisional supplier markets or communicates to the public using the electric distribution company's name or logo, it shall include a disclaimer stating that the affiliated or divisional supplier is not the same company as the electric distribution company, that the prices of the affiliated or divisional supplier are not regulated by the Pennsylvania Commission and that a customer is not required to buy electricity or other products from the affiliated or divisional supplier to receive the same quality service from the electric distribution company. When an affiliated or divisional supplier advertises or communicates through radio, television or other electronic medium to the public using the electric distribution company's name or logo, the affiliated or divisional supplier shall include at the conclusion of any communication a disclaimer that includes all of the disclaimers listed in this paragraph.

10. An electric distribution company which is related as an affiliate or division of an electric generation supplier or transmission supplier (meaning any public utility that owns, operates, or controls facilities used for the transmission of electric energy) which serves any portion of Pennsylvania; and any electric generation supplier which is related as an affiliate or division of any electric distribution company or transmission supplier which serves any portion of Pennsylvania, shall insure that its employees function independently of other related companies.

APPENDIX C: TEXAS CODE OF CONDUCT

§25.272. Code of Conduct for Electric Utilities and Their Affiliates.

(a) **Purpose.** The provisions of this section establish safeguards to govern the interaction between utilities and their affiliates, both during the transition to and after the introduction of competition, to avoid potential market-power abuses and cross-subsidization between regulated and unregulated activities.

(b) **Application.**

(1) **General application.** This section applies to:

(A) electric utilities operating in the State of Texas as defined in the Public Utility Regulatory Act (PURA) §31.002(6), and transactions or activities between electric utilities and their affiliates, as defined in PURA §11.003(2); and

(B) transmission and distribution utilities operating in a qualifying power region in the State of Texas as defined in PURA §31.002(19) upon commission certification of a qualifying power region pursuant to PURA §39.152, and transactions or activities between transmission and distribution utilities and their affiliates, as defined in PURA §11.003(2).

(2) **No circumvention of the code of conduct.** An electric utility, transmission and distribution utility, or competitive affiliate shall not circumvent the provisions or the intent of PURA §39.157 or any rules implementing that section by using any affiliate to provide information, services, products, or subsidies between a competitive affiliate and an electric utility or a transmission and distribution utility.

(3) **Notice of conflict and/or petition for waiver.** Nothing in this section is intended to affect or modify the obligation or duties relating to any rules or standards of conduct that may apply to a utility or the utility's affiliates under orders or regulations of the Federal Energy Regulatory Commission (FERC) or the Securities and Exchange Commission (SEC). A utility shall file with the commission a notice of any provision in this section that conflict with FERC or SEC orders or regulations. A utility that is subject to statutes or regulations in any state that conflict with a provision of this section may petition the commission for a waiver of the conflicting provision on a showing of good cause.

(c) **Definitions.** The following words and terms when used in this section shall have the following meaning unless the context clearly indicates otherwise:

(1) **Arm's length transaction** — The standard of conduct under which unrelated parties, each acting in its own best interest, would carry out a particular transaction. Applied to related parties, a transaction is at arm's length if the transaction could have been made on the same terms to a disinterested third party in a bargained transaction.

(2) **Competitive affiliate** — An affiliate of a utility that provides services or sells products in a competitive energy-related market in this state, including telecommunications services, to the extent those services are energy-related.

(3) **Confidential information** — Any information not intended for public disclosure and considered to be confidential or proprietary by persons privy to such information. Confidential information includes but is not limited to information relating to the interconnection of customers to a utility's transmission or distribution systems, proprietary customer information, trade secrets, competitive information relating to internal manufacturing processes, and information about a utility's transmission or distribution system, operations, or plans for expansion.

(4) **Corporate support services** — Services shared by a utility, its parent holding company, or a separate affiliate created to perform corporate support services, with its affiliates of joint corporate oversight, governance, support systems, and personnel. Examples of services that may be shared, to the extent the services comply with the requirements prescribed by PURA §39.157(d) and (g) and rules implementing those requirements, include human resources, procurement, information technology, regulatory services, administrative services, real estate services, legal services, accounting, environmental services, research and development unrelated to marketing activity and/or

business development for the competitive affiliate regarding its services and products, internal audit, community relations, corporate communications, financial services, financial planning and management support, corporate services, corporate secretary, lobbying, and corporate planning. Examples of services that may not be shared include engineering, purchasing of electric transmission facilities and service, transmission and distribution system operations, and marketing, unless such services are provided by a utility, or a separate affiliate created to perform such services, exclusively to affiliated regulated utilities and only for provision of regulated utility services.

(5) **Proprietary customer information** — Any information compiled by an electric utility on a customer in the normal course of providing electric service that makes possible the identification of any individual customer by matching such information with the customer's name, address, account number, type or classification of service, historical electricity usage, expected patterns of use, types of facilities used in providing service, individual contract terms and conditions, price, current charges, billing records, or any other information that the customer has expressly requested not be disclosed. Information that is redacted or organized in such a way as to make it impossible to identify the customer to whom the information relates does not constitute proprietary customer information.

(6) **Similarly situated** — The standard for determining whether a non-affiliate is entitled to the same benefit a utility offers, or grants upon request, to its competitive affiliate for any product or service. For purposes of this section, all non-affiliates serving or proposing to serve the same market as a utility's competitive affiliate are similarly situated to the utility's competitive affiliate.

(7) **Transaction** — Any interaction between a utility and its affiliate in which a service, good, asset, product, property, right, or other item is transferred or received by either a utility or its affiliate.

(8) **Utility** — An electric utility as defined in PURA §31.002(6) or a transmission and distribution utility as defined in PURA §31.002(19). For purposes of this section, a utility does not include a river authority operating a steam generating plant on or before January 1, 1999, or a corporation authorized by Chapter 245, Acts of the 67th Legislature, Regular Session, 1981 (Article 717p, Vernon's Texas Civil Statutes). In addition, with respect to a holding company exempt under the Public Utility Holding Company Act (PUHCA) §3(a)(2), the term "utility," as used in this section, means the division or business unit through which the holding company conducts utility operations and not the holding company as a legal entity.

(d) **Separation of a utility from its affiliates**.

(1) **Separate and independent entities.** A utility shall be a separate, independent entity from any competitive affiliate.

(2) Sharing of employees, facilities, or other resources. Except as otherwise allowed in paragraphs (3), (4), (5), or (7) of this subsection, a utility shall not share employees, facilities, or other resources with its competitive affiliates unless the utility can prove to the commission prior to such sharing that the sharing will not compromise the public interest. Such sharing may be allowed if the utility implements adequate safeguards precluding employees of a competitive affiliate from gaining access to information in a manner that would allow or provide a means to transfer confidential information from a utility to an affiliate, create an opportunity for preferential treatment or unfair competitive advantage, lead to customer confusion, or create significant opportunities for cross-subsidization of affiliates.

(3) Sharing of officers and directors, property, equipment, computer systems, information systems, and corporate support services. A utility and a competitive affiliate may share common officers and directors, property, equipment, computer systems, information systems, and corporate support services, if the utility implements safeguards that the commission determines are adequate to preclude employees of a competitive affiliate from gaining access to information in a manner that would allow or provide a means to transfer confidential information from a utility to an affiliate, create an opportunity for preferential treatment or unfair competitive advantage, lead to customer confusion, or create significant opportunities for cross-subsidization of affiliates.

(4) **Employee transfers and temporary assignments.** A utility shall not assign, for less than one year, utility employees engaged in transmission or distribution system operations to a competitive affiliate unless the employee does not have knowledge of confidential information. Utility employees engaged in transmission or distribution system operations, including persons employed by a service company affiliated with the utility who are engaged in transmission system operations on a day-to-day basis or have knowledge of transmission or distribution system operations and are transferred to a competitive affiliate, shall not remove or otherwise provide or use confidential property or information gained from the utility or affiliated service company in a discriminatory or exclusive fashion, to the benefit of the competitive affiliate or to the detriment of non-affiliated electric suppliers. Movement of an employee engaged in transmission or distribution system operations, including a person employed by a service company affiliated with the utility who is engaged in transmission or distribution system operations on a day-to-day

basis or has knowledge of transmission or distribution system operations from a utility to a competitive affiliate or vice versa, may be accomplished through either the employee's termination of employment with one company and acceptance of employment with the other, or a transfer to another company, as long as the transfer of an employee from the utility to an affiliate results in the utility bearing no ongoing costs associated with that employee. Transferring employees shall sign a statement indicating that they are aware of and understand the restrictions and penalties set forth in this section. The utility also shall post a conspicuous notice of such a transfer on its Internet site or other public electronic bulletin board within 24 hours and for at least 30 consecutive calendar days. The exception to this provision is that employees may be temporarily assigned to an affiliate or non-affiliated utility to assist in restoring power in the event of a major service interruption or assist in resolving emergency situations affecting system reliability. Consistent with §25.84(h) of this title, however, within 30 days of such a deviation from the code of conduct, the utility shall report this information to the commission and shall conspicuously post the information on its Internet site or other public electronic bulletin board for 30 consecutive calendar days.

(5) **Sharing of office space.** A utility's office space shall be physically separate from that of its competitive affiliates, where physical separation is accomplished by having office space in separate buildings or, if within the same building, by a method such as having offices on separate floors or with separate access, unless otherwise approved by the commission.

(6) **Separate books and records.** A utility and its affiliates shall keep separate books of accounts and records, and the commission may review records relating to a transaction between a utility and an affiliate.

(A) In accordance with generally accepted accounting principles or state and federal guidelines, as appropriate, a utility shall record all transactions with its affiliates, whether they involve direct or indirect expenses.

(B) A utility shall prepare financial statements that are not consolidated with those of its affiliates.

(C) A utility and its affiliates shall maintain sufficient records to allow for an audit of the transactions between the utility and its affiliates. At any time, the commission may, at its discretion, require a utility to initiate, at the utility's expense, an audit of transactions between the utility and its affiliates performed by an independent third party.

(7) **Limited credit support by a utility.** A utility may share credit, investment, or financing arrangements with its competitive affiliates if it complies with subparagraphs (A) and (B) of this paragraph.

(A) The utility shall implement adequate safeguards precluding employees of a competitive affiliate from gaining access to information in a manner that would allow or provide a means to transfer confidential information from a utility to an affiliate, create an opportunity for preferential treatment or unfair competitive advantage, lead to customer confusion, or create significant opportunities for cross-subsidization of affiliates.

(B) The utility shall not allow an affiliate to obtain credit under any arrangement that would include a specific pledge of any assets in the rate base of the utility or a pledge of cash reasonably necessary for utility operations. This subsection does not affect a utility's obligations under other law or regulations, such as the obligations of a public utility holding company under §25.271(c)(2) of this title (relating to Foreign Utility Company Ownership by Exempt Holding Companies).

(e) **Transactions between a utility and its affiliates.**

(1) **Transactions with all affiliates.** A utility shall not subsidize the business activities of any affiliate with revenues from a regulated service. In accordance with PURA and the commission's rules, a utility and its affiliates shall fully allocate costs for any shared services, including corporate support services, offices, employees, property, equipment, computer systems, information systems, and any other shared assets, services, or products.

(A) **Sale of products or services by a utility.** Unless otherwise approved by the commission and except for corporate support services, any sale of a product or service by a utility shall be governed by a tariff approved by the commission. Products and services shall be made available to any third party entity on the same terms and conditions as the utility makes those products and services available to its affiliates.

(B) **Purchase of products, services, or assets by a utility from its affiliate.** Products, services, and assets shall be priced at levels that are fair and reasonable to the customers of the utility and that reflect the market value of the product, service, or asset.

(C) **Transfers of assets.** Except for asset transfers implementing unbundling pursuant to PURA §39.051, asset valuation in accordance with PURA §39.262, and transfers of property pursuant to a financing order issued under PURA, Chapter 39, Subchapter G, assets transferred from a utility to its affiliates shall be priced at levels that are fair and reasonable to the customers of the utility and that reflect the market value of the assets or the utility's fully allocated cost to provide those assets.

(D) **Transfer of assets implementing restructuring legislation.** The transfer from a utility to an affiliate of assets implementing unbundling pursuant to PURA §39.051, asset valuation in accordance with PURA §39.262, and transfers of property pursuant to a financing order issued under PURA, Chapter 39, Subchapter G will be reviewed by the commission pursuant to the applicable provisions of PURA, and any rules implementing those provisions.

(2) **Transactions with competitive affiliates.** Unless otherwise allowed in this subsection, transactions between a utility and its competitive affiliates shall be at arm's length. A utility shall maintain a contemporaneous written record of all transactions with its competitive affiliates, except those involving corporate support services and those transactions governed by tariffs. Such records, which shall include the date of the transaction, name of affiliate involved, name of a utility employee knowledgeable about the transaction, and a description of the transaction, shall be maintained by the utility for three years. In addition to the requirements specified in paragraph (1) of this subsection, the following provisions apply to transactions between utilities and their competitive affiliates.

(A) **Provision of corporate support services.** A utility may engage in transactions directly related to the provision of corporate support services with its competitive affiliates. Such provision of corporate support services shall not allow or provide a means for the transfer of confidential information from the utility to the competitive affiliate, create the opportunity for preferential treatment or unfair competitive advantage, lead to customer confusion, or create significant opportunities for cross-subsidization of the competitive affiliate.

(B) **Purchase of products or services by a utility from its competitive affiliate.** Except for corporate support services, a utility may not enter into a transaction to purchase a product or service from a competitive affiliate that has a per unit value of $75,000 or more, or a total value of $1 million or more, unless the transaction is the result of a fair, competitive bidding process formalized in a contract subject to the provisions of §25.273 of this title (relating to Contracts Between Electric Utilities and Their Competitive Affiliates).

(C) **Transfers of assets.** Except for asset transfers facilitating unbundling pursuant to PURA §39.051, asset valuation in accordance with PURA §39.262, and transfers of property pursuant to a financing order issued under PURA, Chapter 39, Subchapter G, any transfer from a utility to its competitive affiliates of assets with a per unit value of $75,000 or more, or a total value of $1 million or more, must be the result of a fair, competitive bidding process formalized in a contract subject to the provisions of §25.273 of this title.

(f) **Safeguards relating to provision of products and services.**

(1) **Products and services available on a non-discriminatory basis.** If a utility makes a product or service, other than corporate support services, available to a competitive affiliate, it shall make the same product or service available, contemporaneously and in the same manner, to all similarly situated entities, and it shall apply its tariffs, prices, terms, conditions, and discounts for those products and services in the same manner to all similarly situated entities. A utility shall process all requests for a product or service from competitive affiliates or similarly situated non-affiliated entities on a non-discriminatory basis. If a utility's tariff allows for discretion in its application, the utility shall apply that provision in the same manner to its competitive affiliates and similarly situated non-affiliates, as well as to their respective customers. If a utility's tariff allows no discretion in its application, the utility shall strictly apply the tariff. A utility shall not use customer-specific contracts to circumvent these requirements, nor create a product or service arrangement with its competitive affiliate that is so unique that no competitor could be similarly situated to utilize the product or service.

(2) **Discounts, rebates, fee waivers, or alternative tariff terms and conditions.** If a utility offers its competitive affiliate or grants a request from its competitive affiliate for a discount, rebate, fee waiver, or alternative tariff terms and conditions for any product or service, it must make the same benefit contemporaneously available, on a non-discriminatory basis, to all similarly situated non-affiliates. The utility shall post a conspicuous notice on its Internet site or public electronic bulletin board for at least 30 consecutive calendar days providing the following information: the name of the competitive affiliate involved in the transaction; the rate charged; the normal rate or tariff condition; the period for which the benefit applies; the quantities and the delivery points involved in the transaction (if any); any conditions or requirements applicable to the benefit; documentation of any cost differential

underlying the benefit; and the procedures by which non-affiliates may obtain the same benefit. The utility shall maintain records of such information for a minimum of three years, and shall make such records available for third party review within 72 hours of a written request, or at a time mutually agreeable to the utility and the third party. A utility shall not create any arrangement with its competitive affiliate that is so unique that no competitor could be similarly situated to benefit from the discount, rebate, fee waiver, or alternative tariff terms and conditions.

(3) **Tying arrangements prohibited.** Unless otherwise allowed by the commission through a rule or tariff prior to a utility's unbundling pursuant to PURA §39.051, a utility shall not condition the provision of any product, service, pricing benefit, or alternative terms or conditions upon the purchase of any other good or service from the utility or its competitive affiliate.

(g) **Information safeguards.**

(1) **Proprietary customer information.** A utility shall provide a customer with the customer's proprietary customer information, upon request by the customer. Unless a utility obtains prior affirmative written consent or other verifiable authorization from the customer as determined by the commission, or unless otherwise permitted under this subsection, it shall not release any proprietary customer information to a competitive affiliate or any other entity, other than the customer, an independent organization as defined by PURA §39.151, or a provider of corporate support services for the sole purpose of providing corporate support services in accordance with subsection (e)(2)(A) of this section. The utility shall maintain records that include the date, time, and nature of information released when it releases customer proprietary information to another entity in accordance with this paragraph. The utility shall maintain records of such information for a minimum of three years, and shall make the records available for third party review within 72 hours of a written request, or at a time mutually agreeable to the utility and the third party. When the third party requesting review of the records is not the customer, commission, or Office of Public Utility Counsel, the records may be redacted in such a way as to protect the customer's identity. If proprietary customer information is released to an independent organization or a provider of corporate support services, the independent organization or entity providing corporate support services is subject to the rules in this subsection with respect to releasing the information to other persons.

(A) **Exception for law, regulation, or legal process.** A utility may release proprietary customer information to another entity without customer authorization where authorized or requested to do so by the commission or where required to do so by law, regulation, or legal process.

(B) **Exception for release to governmental entity.** A utility may release proprietary customer information without customer authorization to a federal, state, or local governmental entity or in connection with a court or administrative proceeding involving the customer or the utility; provided, however, that the utility shall take all reasonable actions to protect the confidentiality of such information, including, but not limited to, providing such information under a confidentiality agreement or protective order, and shall also promptly notify the affected customer in writing that such information has been requested.

(C) **Exception to facilitate transition to customer choice.** In order to facilitate the transition to customer choice, a utility may release proprietary customer information to its affiliated retail electric provider or providers of last resort without authorization of those customers only during the period from September 1, 2001, through December 31, 2001, or during a different period prescribed by the commission.

(D) **Exception for release to providers of last resort.** On or after January 1, 2002, a utility may provide proprietary customer information to a provider of last resort without customer authorization for the purpose of serving customers who have been switched to the provider of last resort.

(2) **Non-discriminatory availability of aggregate customer information.** A utility may aggregate non-proprietary customer information, including, but not limited to, information about a utility's energy purchases, sales, or operations or about a utility's energy-related goods or services. However, except in circumstances solely involving the provision of corporate support services in accordance with subsection (e)(2)(A) of this section, a utility shall aggregate non-proprietary customer information for a competitive affiliate only if the utility makes such aggregation service available to all non-affiliates under the same terms and conditions and at the same price as it is made available to any of its affiliates. In addition, no later than 24 hours prior to a utility's provision to its competitive affiliate of aggregate customer information, the utility shall post a conspicuous notice on its Internet site or other public electronic bulletin board for at least 30 consecutive calendar days, providing the following information: the name of the competitive affiliate to which the information will be provided, the rate charged for the information, a meaningful description of the information provided, and the procedures by which non-affiliates may obtain the same information under the same terms and conditions. The utility shall maintain records of such

information for a minimum of three years, and shall make such records available for third party review within 72 hours of a written request, or at a time mutually agreeable to the utility and the third party.

(3) **No preferential access to transmission and distribution information.** A utility shall not allow preferential access by its competitive affiliates to information about its transmission and distribution systems.

(4) **Other limitations on information disclosure.** Nothing in this rule is intended to alter the specific limitations on disclosure of confidential information in the Texas Utilities Code, the Texas Government Code, Chapter 552, or the commission's substantive and procedural rules.

(5) **Other information**. Except as otherwise allowed in this subsection, a utility shall not share information, except for information required to perform allowed corporate support services, with competitive affiliates unless the utility can prove to the commission that the sharing will not compromise the public interest prior to any such sharing. Information that is publicly available, or that is unrelated in any way to utility activities, may be shared.

(h) **Safeguards relating to joint marketing and advertising.**

(1) **Utility name or logo.** Before September 1, 2005, a utility shall not allow the use of its corporate name, trademark, brand, or logo by a competitive affiliate, on employee business cards or in any written or auditory advertisements of specific services to existing or potential residential or small commercial customers located within the utility's certificated service area, whether through radio or television, Internet-based, or other electronic format accessible to the public, unless the competitive affiliate includes a disclaimer with its use of the utility's corporate name, trademark, brand, or logo. Such disclaimer of the corporate name, trademark, brand, or logo in the material distributed must be written in a bold and conspicuous manner or clearly audible, as appropriate for the communication medium, and shall state the following: "{Name of competitive affiliate} is not the same company as {name of utility} and is not regulated by the Public Utility Commission of Texas, and you do not have to buy {name of competitive affiliate}'s products to continue to receive quality regulated services from {name of utility}."

(2) **Joint marketing, advertising, and promotional activities.**

(A) A utility shall not:

(i) provide or acquire leads on behalf of its competitive affiliates;

(ii) solicit business or acquire information on behalf of its competitive affiliates;

(iii) give the appearance of speaking or acting on behalf of any of its competitive affiliates;

(iv) share market analysis reports or other types of proprietary or non-publicly available reports, including, but not limited to, market forecast, planning, or strategic reports, with its competitive affiliates;

(v) represent to customers or potential customers that it can offer competitive retail services bundled with its tariffed services; or

(vi) request authorization from its customers to pass on information exclusively to its competitive affiliate.

(B) A utility shall not engage in joint marketing, advertising, or promotional activities of its products or services with those of a competitive affiliate in a manner that favors the affiliate. Such joint marketing, advertising, or promotional activities include, but are not limited to, the following activities:

(i) acting or appearing to act on behalf of a competitive affiliate in any communications and contacts with any existing or potential customers;

(ii) joint sales calls;

(iii) joint proposals, either as requests for proposals or responses to requests for proposals;

(iv) joint promotional communications or correspondence, except that a utility may allow a competitive affiliate access to customer bill advertising inserts according to the terms of a commission-approved tariff so long as access to such inserts is made available on the same terms and conditions to non-affiliates offering similar services as the competitive affiliate that uses bill inserts;

(v) joint presentations at trade shows, conferences, or other marketing events within the State of Texas; and

(vi) providing links from a utility's Internet web site to a competitive affiliate's Internet web site.

(C) At a customer's unsolicited request, a utility may participate in meetings with a competitive affiliate to discuss technical or operational subjects regarding the utility's provision of transmission or distribution services to the customer, but only in the same manner and to the same extent the utility participates in such meetings with unaffiliated electric or energy services suppliers and their customers. The utility shall not listen to, view, or otherwise participate in any way in a sales discussion between a customer and a competitive affiliate or an unaffiliated electric or energy services supplier.

(3) **Requests for specific competitive affiliate information.** If a customer or potential customer makes an unsolicited request to a utility for information specifically about any of its competitive affiliates, the utility may refer the customer or potential customer to the competitive affiliate for more information. Under this paragraph, the only information that a utility may provide to the customer or potential customer is the competitive affiliate's address and telephone number. The utility shall not transfer the customer directly to the competitive affiliate's customer service office via telephone or provide any other electronic link whereby the customer could contact the competitive affiliate through the utility. When providing the customer or potential customer information about the competitive affiliate, the utility shall not promote its competitive affiliate or its competitive affiliate's products or services, nor shall it offer the customer or potential customer any opinion regarding the service of the competitive affiliate or any other service provider.

(4) **Requests for general information about products or services offered by competitive affiliates and their competitors.** If a customer or potential customer requests general information from a utility about products or services provided by its competitive affiliate or its affiliate's competitors, the utility shall not promote its competitive affiliate or its affiliate's products or services, nor shall the utility offer the customer or potential customer any opinion regarding the service of the competitive affiliate or any other service provider. The utility may direct the customer or potential customer to a telephone directory or to the commission, or provide the customer with a recent list of suppliers developed and maintained by the commission, but the utility may not refer the customer or potential customer to the competitive affiliate except as provided for in paragraph (3) of this subsection.

(i) **Remedies and enforcement.**

(1) **Internal codes of conduct for the transition period.** During the transition to competition, including the period prior to and during utility unbundling pursuant to PURA §39.051, each utility shall implement an internal code of conduct consistent with the spirit and intent of PURA §39.157(d) and with the provisions of this section. Such internal codes of conduct are

subject to commission review and approval in the context of a utility's unbundling plan submitted pursuant to PURA §39.051(e); however, such internal codes of conduct shall take effect, on an interim basis, on January 10, 2000. The internal codes of conduct shall be developed in good faith by the utility based on the extent to which its affiliate relationships are known by January 10, 2000, and then updated as necessary to ensure compliance with PURA and commission rules. A utility exempt from PURA Chapter 39 pursuant to PURA §39.102(c) shall adopt an internal code of conduct that is consistent with its continued provision of bundled utility service during the period of its exemption.

(2) **Ensuring compliance for new affiliates.** A utility and a new affiliate are bound by the code of conduct immediately upon creation of the new affiliate. Upon the creation of a new affiliate, the utility shall immediately post a conspicuous notice of the new affiliate on its Internet site or other public electronic bulletin board for at least 30 consecutive calendar days. Within 30 days of creation of the new affiliate, the utility shall file an update to its internal code of conduct and compliance plan, including all changes due to the addition of the new affiliate. The utility shall ensure that any interaction with the new affiliate is in compliance with this section.

(3) **Compliance Audits**. No later than one year after the utility has unbundled pursuant to PURA §39.051, and, at a minimum, every third year thereafter, the utility shall have an audit prepared by independent auditors that verifies that the utility is in compliance with this section. The utility shall file the results of each audit with the commission within one month of the audit's completion. The cost of the audits shall not be charged to utility ratepayers.

(4) **Informal complaint procedure.** A utility shall establish and file with the commission a complaint procedure for addressing alleged violations of this section. This procedure shall contain a mechanism whereby all complaints shall be placed in writing and shall be referred to a designated officer of the utility. All complaints shall contain the name of the complainant and a detailed factual report of the complaint, including all relevant dates, companies involved, employees involved, and the specific claim. The designated officer shall acknowledge receipt of the complaint in writing within five working days of receipt. The designated officer shall provide a written report communicating the results of the preliminary investigation to the complainant within thirty days after receipt of the complaint, including a description of any course of action that will be taken. In the event the utility and the complainant are unable to resolve the complaint, the complainant may file a formal complaint with the commission. The utility shall notify the complainant of his or her right to file a formal complaint with the commission, and shall provide the complainant with the commission's address and telephone number. The utility and the complainant shall make a good faith effort to resolve the complaint on an informal basis as promptly as practicable. The informal complaint process shall not be a prerequisite for filing a formal complaint with the commission, and the commission may, at any time, institute a complaint against a utility on its own motion.

(5) **Enforcement by the commission.** A violation or series or set of violations of this section that materially impairs, or is reasonably likely to materially impair, the ability of a person to compete in a competitive market shall be deemed an abuse of market power.

(A) In addition to other methods that may be available, the commission may enforce the provisions of this rule by:

(i) seeking an injunction or civil penalties to eliminate or remedy the violation or series or set of violations;

(ii) suspending, revoking, or amending a certificate or registration as authorized by PURA §39.356; or

(iii) pursuing administrative penalties under PURA, Chapter 15, Subchapter B.

(B) The imposition of one penalty under this section does not preclude the imposition of other penalties as appropriate for the violation or series or set of violations.

(C) In assessing penalties, the commission shall consider the following factors:

(i) the utility's prior history of violations;

(ii) the utility's efforts to comply with the commission's rules, including the extent to which the utility has adequately and physically separated its office, communications, accounting systems, information systems, lines of authority, and operations from its affiliates, and efforts to enforce these rules;

(iii) the nature and degree of economic benefit gained by the utility's competitive affiliate;

(iv) the damages or potential damages resulting from the violation or series or set of violations;

(v) the size of the business of the competitive affiliate involved;

(vi) the penalty's likely deterrence of future violations; and

(vii) such other factors deemed appropriate and material to the particular circumstances of the violation or series or set of violations.

(6) **No immunity from antitrust enforcement.** Nothing in these affiliate rules shall confer immunity from state or federal antitrust laws. Sanctions imposed by the commission for violations of this rule do not affect or pre-empt antitrust liability, but rather are in addition to any antitrust liability that may apply to the anti-competitive activity. Therefore, antitrust remedies also may be sought in federal or state court to cure anti-competitive activities.

(7) **No immunity from civil relief.** Nothing in these affiliate rules shall preclude any form of civil relief that may be available under federal or state law, including, but not limited to, filing a complaint with the commission consistent with this subsection.

(8) **Pre-emption**. This rule supersedes any procedures or protocols adopted by an independent organization as defined by PURA §39.151, or similar entity, that conflict with the provisions of this rule.

APPENDIX D: COMPARISON OF ALBERTA CODE OF CONDUCT WITH ONTARIO ARC

The following table provides a comparison of the Alberta Code of Conduct with the Ontario Energy Board's Affiliate Relationships Code (ARC). The Ontario ARC is attached as Attachment 1. Going from left to right, the left column of the table provides a paraphrased version of clauses that are unique to the Alberta Code of Conduct, the centre column describes those areas which are covered similarly by both codes, and the right column provides the clauses that are unique to the ARC. For simplicity and ease of comparison, owners (used to describe the WSPs in Alberta's Code of Conduct) are referred to as utilities in the following table.

Clauses Unique to Alberta Code of Conduct	*Clauses Included in both Alberta Code of Conduct and OEB ARC ( ) = Code of Conduct #, [ ] = OEB ARC #*	*Clauses Unique to OEB ARC*
Degree of Separation		
	- Utility and affiliate must maintain separate accounting and financial records. (11 (1 – 6)) and [2.1.1]	
	- Utility and affiliated retailer must be physically separate. (8 (1,2)) and [2.1.2]	
- 12 (1) and 12 (2) – utility and affiliated retailer may share governance and corporate oversight.		- 2.1.3 and 2.1.4 - A utility shall ensure that at least two-thirds of its Board of Directors is independent from any affiliate. Municipal utilities are exempt until after January 1, 2004.
Sharing of Services and Resources		
		- 2.2.1 – Transactions between utility and affiliate must be done under a Services Agreement which should include pricing and cost allocation mechanisms, confidentiality arrangements, apportionment of risks and a dispute resolution process. Terms may be reviewed by the OEB.
- 8 (4) - Publicly available information is excluded.	- Utility must ensure that all confidential information is protected from access by the affiliate. (8 (3)) and [2.2.2]	- 2.2.1 - Compliance must satisfy requirements of section 5900 of CICA Handbook, plus additional direction as provided by the OEB. Results of any review shall be made available to the OEB.

Clauses Unique to Alberta Code of Conduct	***Clauses Included in both Alberta Code of Conduct and OEB ARC ( ) = Code of Conduct #, [ ] = OEB ARC #***	***Clauses Unique to OEB ARC***
• 10 (b) – Rotation of employees with access to confidential information between utility and affiliated retailers for less than one year is prohibited.	• Utilities and affiliated retailers cannot share employees with access to confidential information. (10 (a) and [2.2.3] • Can share staff in an emergency. (43) and [2.2.5]	• 2.2.4 – A utility shall not share with an "affiliated retailer" any employees that carry out the day-to-day operation of the utility's network.
Transfer Pricing		
• 14 (2) If provided at regulated price, the regulated price is deemed to be fair market value.	• Utility is not allowed to provide goods or services to affiliated retailer for less than fair market value and not allowed to purchase goods or services from affiliate for more than fair market value. (14 (1, 4)) and [2.3.1 and 2.3.2]	• 2.3.3 – Where fair market value is not available, utility shall charge no less than a cost-based price and shall pay no more than a cost-based price. • 2.3.4 - A utility shall sell assets to an affiliate at a price no less than net book value.
Financial Transactions with Affiliate		
		• 2.4.1 – Utility can provide loans or guarantees to, or investments in, affiliate as long as aggregate amount does not exceed 25% of the value of the utility's total equity. • 2.4.2 – Terms for any loans, guarantees or other financial transactions with an affiliate can be no more favourable than the affiliate would be able to achieve on its own.
Equal Access to Services		
	• Utility cannot endorse or support marketing activities of an affiliated retailer and cannot highlight the name of affiliated retailer in any communication with customers. (18, 19) and [2.5.1]	
• 17 – Utility must make reasonable effort to be equally available to all retailers for joint meetings with customers.	• Utility cannot imply any preference for affiliated retailer. [15) and [2.5.2]	

Clauses Unique to Alberta Code of Conduct	*Clauses Included in both Alberta Code of Conduct and OEB ARC ( ) = Code of Conduct #, [ ] = OEB ARC #*	*Clauses Unique to OEB ARC*
	- Utility must ensure that affiliated retailer does not use its name, logo or distinguishing characteristics in a way that would mislead customers as to the distinction between the utility and affiliated retailer. (16) and [2.5.3 and 2.5.4]	- 2.5.4 – If utility becomes aware of inappropriate marketing activity by an affiliate it shall: - immediately takes steps to notify affected customers of the violation - take necessary steps to ensure the affiliate is aware of the concern, and - and inform the OEB in writing of such activity and remedial measures that were undertaken.
- 5 – Utility must allow equal access to written communication (eg, bill inserts) to all retailers. - 6 – Utility must not make or appear to make provision of regulated services conditional upon customer's purchase of goods and services from its affiliated retailer.	- Utility shall provide equal access to regulated services. (3 and 4) and [2.5.5 and 2.5.6]	
- 7(2) – Utility can appoint its affiliated retailer as a default retailer or supplier of last resort.	- Utility shall not transfer a customer to an affiliated retailer with the written consent of the customer. (7 (1)) and [2.5.7]	
Confidentiality of Information		
- 9 – Utility employees, agents, contractors or officers who become employees, agents, contractors or officers of a retailer must not use or disclose any customer information gained through employment, agency or contract with the utility.	- Utility cannot release confidential customer or retailer information with written consent unless for billing, law enforcement or other special reasons. (21(1-3), 22, 23) and [2.6.1 and 2.6.2]	- 2.6.3 – Customer information that has been aggregated such that any confidential customer information cannot be identified may be disclosed, but must be disclosed on a non-discriminatory basis to any party making the request.

Clauses Unique to Alberta Code of Conduct	Clauses Included in both Alberta Code of Conduct and OEB ARC ( ) = Code of Conduct #, [ ] = OEB ARC #	Clauses Unique to OEB ARC
Compliance Measures		
· 26 (1) (a) and 28 – must develop compliance plan with voluntary dispute resolution procedures and update plan as required. · 26 (1) (b) – must file compliance plan with appropriate agency. · 27 (b) must provide compliance plan to affiliated retailer. · 29 - must make compliance plan available for inspection by the public.	· Utility must ensure compliance with this Code. (20, 26, 27 and 28) and [2.7.1,2 and 3]	· 2.7.1 – Specifically requires performance of periodic compliance reviews and monitoring of employees' compliance.
Record Keeping and Reporting Requirements		
· 31 (1) – Utility must maintain log of transfer of officers, employees, agents and contractors between utility and its affiliated retailer. · 14 (3) Utility must maintain a record of transactions with its affiliated retailer. · 31 (2, 3, 4) – Utility must maintain log of pending and resolved complaints about non-compliance and make this log available to relevant agencies. · 32 – Utility must have an audit prepared by an independent auditor within 15 months after affiliated retailer begins providing retail services. MSA can appoint a different auditor and can request additional audits after the initial audit. · 33 – Utility must prepare an annual report of complaints and submit the report to relevant agencies.		· 2.8.1 – Utility must maintain records in form prescribed by the OEB (NB – form not yet specified by the OEB). · 2.8.2 – Utility must provide OEB with a list of all affiliates, description of their business activities, corporate organization chart and the utility's specific costing and transfer pricing guidelines, tendering procedures and Services Agreement. · 2.8.3 – Where the total cost of transactions with an affiliate exceed $100,000 annually, utility shall make available to the OEB information on the name of the affiliate, the product or service in question, the form of price or cost determination and the start date and expected completion date of the transaction.

Clauses Unique to Alberta Code of Conduct	***Clauses Included in both Alberta Code of Conduct and OEB ARC ( ) = Code of Conduct #, [ ] = OEB ARC #***	***Clauses Unique to OEB ARC***
Enforcement · 35 – Any person can make a complaint to the MSA or the regulator, the MSA must investigate the complaint and/or may participate in the voluntary resolution of the complaint. · 37 – Regulator or Power Pool can impose fines and/or other terms and conditions as appropriate.		
Disclosure of Information Information obtained by an electric utility or alternative electric supplier in the course of conducting its regulated business in Alberta shall not be shared directly or indirectly with its affiliates or other entities within its corporate structure unless that same information is provided to competitors operating in the state on the same terms and conditions and contemporaneously. This provision includes, but is not limited to, the following:		